



# STIC Search Report

## EIC 2600

STIC Database Tracking Number: 156547

**TO:** Brian Le  
**Location:** Knox 9A54  
**Art Unit:** 2623  
**Thursday, June 16, 2005**

**Case Serial Number:** 10607184

**From:** Pamela Reynolds  
**Location:** EIC 2600  
**KNOX 8B54**  
**Phone:** 571-272-3505  
  
**Pamela.Reynolds@uspto.gov**

### Search Notes

Dear Brian Le,

Please find attached the search results for 10607184. I used the search strategy we discussed. I searched the standard Dialog files, and the internet.

If you would like a re-focus please let me know.

Thank you.



# STIC Search Results Feedback Form

## EIC 2600

Questions about the scope or the results of the search? Contact **the EIC searcher or contact:**

**Pamela Reynolds, EIC 2600 Team Leader**  
**571-272-3505, Knox 8B59**

## Voluntary Results Feedback Form

➤ *I am an examiner in Workgroup:*  *Example: 2663*

➤ *Relevant prior art found, search results used as follows:*

- 102 rejection
- 103 rejection
- Cited as being of interest.
- Helped examiner better understand the invention.
- Helped examiner better understand the state of the art in their technology.

*Types of relevant prior art found:*

- Foreign Patent(s)
- Non-Patent Literature  
(journal articles, conference proceedings, new product announcements etc.)

➤ *Relevant prior art not found:*

- Results verified the lack of relevant prior art (helped determine patentability).
- Results were not useful in determining patentability or understanding the invention.

**Comments:**

Drop off or send completed forms to STIC/EIC2600 Knox 8B59



54 Rust

158547

Access DB#

## SEARCH REQUEST FORM

### Scientific and Technical Information Center

Requester's Full Name Brian Q. Lee Examiner #: 79178 Date: 6-15-08  
Art Unit: 2623 Phone Number 2-7424 Serial Number: 10607184  
Location: 1600 9 A 54 Results Format Preferred (circle): PAPER  DISK  E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the exact species or structures; keywords, synonyms, acronyms; and registry numbers; and combine with the concept or utility of the invention. Define all terms that may have a special meaning. Give examples or relevant citations, authors, etc., if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: \_\_\_\_\_

Inventors (please provide full names): \_\_\_\_\_

Earliest Priority Filing Date: \_\_\_\_\_

\*For Sequence Searches Only\* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

Gemstone

12-21-2001

### STAFF USE ONLY

Searcher: Mayfield

Searcher Phone #: 272-3555

Searcher Location: 1600 9 A 54

Date Searcher Picked Up: 6-15-08 3:15 PM

Date Completed: 6-16-08 1:45 PM

Searcher Prep & Review Time: \_\_\_\_\_

Clerical Prep Time: \_\_\_\_\_

Online Time: 1W

### Type of Search

Sequence (#) \_\_\_\_\_

AA Sequence (#) \_\_\_\_\_

Structure (#) \_\_\_\_\_

Bibliographic  \_\_\_\_\_

Litigation  \_\_\_\_\_

Fulltext  \_\_\_\_\_

Patent Family \_\_\_\_\_

Other \_\_\_\_\_

### Vendors and cost where applicable

STN \_\_\_\_\_

Dialog  \_\_\_\_\_

Questel/Orbit \_\_\_\_\_

Dr. Link \_\_\_\_\_

Lexis/Nexis \_\_\_\_\_

Sequence Systems \_\_\_\_\_

WWW/Internet  \_\_\_\_\_

Other (specify) \_\_\_\_\_

File 344:Chinese Patents Abs Aug 1985-2005/May

(c) 2005 European Patent Office

File 347:JAPIO Nov 1976-2005/Feb(Updated 050606)

(c) 2005 JPO & JAPIO

File 350:Derwent WPIX 1963-2005/UD,UM &UP=200537

(c) 2005 Thomson Derwent

Set	Items	Description
S1	41371	GEMSTONE? OR GEMS OR AMYTHEST OR DIAMOND??
S2	101488	(LOCAT? OR IDENTIF? OR FIND? OR READING OR READS) (3N) (INFORMATION OR INDICIA OR INDICUM)
S3	75761	MANUFACTURER OR OWNER OR RETAILER OR SELLER?? OR PRODUCER? OR MINE OR COUNTRY(2N)ORIGIN OR BRAND()NAME
S4	1564161	NUMBER OR ID OR (IDENTIFICATION OR CERTIFICATION) () NUMBER??
S5	787268	LOGO OR SYMBOLS OR DESIGN? OR ALPHANUMERIC OR DATES OR MESSAGES
S6	124691	COORDINATE? OR XY
S7	33	(AUTHENTICAT? OR CERTIF?) AND S1
S8	6411	(PURITY OR QUALITY OR TYPE) AND S1
S9	1589	(S1 OR S2) (3N) (SCANNING OR SCANNER OR LASER?)
S10	1189761	NEAR() FIELD() OPTIC?? OR OPTIC?
S11	198	(ETCH? OR MARKING OR MARKS OR MARKED OR INSCRIB?) AND S1 AND (S3 OR S4 OR S5)
S12	0	MICROSCOPIC(3N)S11
S13	347	AU=(PATTON D? OR SPOONOWER J? OR PATTON, D? OR SPOONOWER, J?)
S14	2499	MICROMACHIN?
S15	9	S7 AND (S3 OR S4 OR S5)
S16	1063	(S8 OR S9) AND S10
S17	52	S16 AND S5
S18	25	S17 AND LASER??
S19	3	S18 AND S4
S20	3	S19 NOT S15
S21	56	S11 AND (S10 OR LASER?? OR S14)
S22	29	S21 NOT PY=>2002

15/3,K/1 (Item 1 from file: 347)  
DIALOG(R)File 347:JAPIO  
(c) 2005 JPO & JAPIO. All rts. reserv.

08197431 \*\*Image available\*\*  
**DIAMOND WITH CERTIFICATE**

PUB. NO.: 2004-310191 [JP 2004310191 A]  
PUBLISHED: November 04, 2004 (20041104)  
INVENTOR(s): MATSUMOTO TAKUYA  
APPLICANT(s): TWINSHIP JAPAN KK  
APPL. NO.: 2003-099259 [JP 200399259]  
FILED: April 02, 2003 (20030402)

**DIAMOND WITH CERTIFICATE**

#### ABSTRACT

PROBLEM TO BE SOLVED: To diversify the value of a **diamond** from the standpoint that one keeps a **diamond** carefully for a long period of time and usually wears it without hiding it in a safe.

SOLUTION: A **certificate** 10 certifying the identity of a crude **diamond** is attached to each of a plurality of **diamonds** obtained by dividing the crude **diamond**, and each **diamond** 1 is given an **ID** 2. The **diamonds** each are identified with the **ID** in the **certificate**.

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15/3,K/2 (Item 2 from file: 347)  
DIALOG(R)File 347:JAPIO  
(c) 2005 JPO & JAPIO. All rts. reserv.

07974069 \*\*Image available\*\*  
**BUSINESS MODEL FOR QUALITY CERTIFICATION AND ANTITHEFT SYSTEM FOR JEWEL**

PUB. NO.: 2004-086828 [JP 2004086828 A]  
PUBLISHED: March 18, 2004 (20040318)  
INVENTOR(s): OUCHI KAZUMI  
SAITO TADAOKI  
APPLICANT(s): OUCHI KAZUMI  
APPL. NO.: 2002-289233 [JP 2002289233]  
FILED: August 27, 2002 (20020827)

**BUSINESS MODEL FOR QUALITY CERTIFICATION AND ANTITHEFT SYSTEM FOR JEWEL**

#### ABSTRACT

PROBLEM TO BE SOLVED: To enable police investigation and return to a legitimate **owner**, based on a mark incused on a gem even, when it is taken down to...

... dimensional bar code, own fingerprint, and the like) are incused on a surface of a **diamond** by a laser beam. The marks incused on each of the **diamonds** enable quality, polishing completion data and the legitimate **owner** to be searched on line by reading the marks with a mark reader when required...

15/3,K/3 (Item 3 from file: 347)

DIALOG(R) File 347:JAPIO

(c) 2005 JPO & JAPIO. All rts. reserv.

00711831 \*\*Image available\*\*

METHOD FOR MAKING PHOTOGRAPHING FOR DECIDING IDENTITY OF DIAMOND

PUB. NO.: 56-032131 [JP 56032131 A]

PUBLISHED: April 01, 1981 (19810401)

INVENTOR(s): GUNJIKAKE KIYOSHI

APPLICANT(s): GUNJIKAKE KIYOSHI [000000] (An Individual), JP (Japan)

APPL. NO.: 54-107807 [JP 79107807]

FILED: August 24, 1979 (19790824)

JOURNAL: Section: P, Section No. 64, Vol. 05, No. 84, Pg. 138, June 02, 1981 (19810602)

METHOD FOR MAKING PHOTOGRAPHING FOR DECIDING IDENTITY OF DIAMOND

ABSTRACT

... picture of the polishing traces that have been produced at the final polishing of a **diamond** and cannot be erased thereby making a photograph for deciding identity...

...CONSTITUTION: The polishing traces 1a... which are produced in a **diamond** 1 at its final polishing and cannot be erased are magnified to the extent of...

... positive photograph 4 of a predetermined size by this photographing is beforehand affixed to a **certificate** 3, the identity of the **diamond** may be decided without making examination at every time, even when the **owner** of the **diamond** 1 changes.

15/3,K/4 (Item 1 from file: 350)

DIALOG(R) File 350:Derwent WPIX

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016808588 \*\*Image available\*\*

WPI Acc No: 2005-132869/200515

XRPX Acc No: N05-113804

Diamond **pod** for jewelry, has octahedral precious metal filigree cage accommodating free moving natural diamond **crystal**

Patent Assignee: WATERFALL PARK ESTATE PTY LTD (WATE-N)

Inventor: BLAIR L

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
AU 2004100945	A4	20041209	AU 2004100945	A	20041109	200515 B

Priority Applications (No Type Date): AU 2004100945 A 20041109

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

AU 2004100945 A4 14 A44C-017/02

Diamond **pod** for jewelry, has octahedral precious metal filigree cage accommodating free moving natural diamond **crystal**

Abstract (Basic):

... cage fitted with a precious metal annual feature (1). The cage accommodates free moving natural **diamond** **crystal**. The outer filigree

pattern **design** reflects the structural trigon feature of natural **diamond** and avoids freely movably **diamond** crystal to pass through. The natural **diamond** crystal has a unique laser inscribed **number** matching the **number** on the **authentication certificate**.

... The **design** of the outer pod allows a secure way of protecting the **diamond** crystal while the filigree **design** allows any potential energy to easily pass through to the wearer. Ensures that **diamond** crystal is legally purchased. The top and bottom octahedral points of the cage have a...

...jewelry by people with minimal jewelry making skills. The decorative box or packaging allows the **diamond** pod and **certificate** to be easily supplied and stored together...

...The figures show octahedral shape and filigree patterns from four angles, natural **diamond** crystals, and examples of laser inscribed **number** matching on **authentication certificate**.

Title Terms: **DIAMOND** ;

15/3,K/5 (Item 2 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2005 Thomson Derwent. All rts. reserv.

016611583 \*\*Image available\*\*  
WPI Acc No: 2004-770317/200476  
XRPX Acc No: N04-607840

Diamond with certificate has identification name specification for each diamond that is obtained by dividing single raw ore  
Patent Assignee: TWINSHIP JAPAN KK (TWIN-N)  
Number of Countries: 001 Number of Patents: 001  
Patent Family:  
Patent No Kind Date Applicat No Kind Date Week  
JP 2004310191 A 20041104 JP 200399259 A 20030402 200476 B

Priority Applications (No Type Date): JP 200399259 A 20030402

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes  
JP 2004310191 A 6 G05B-019/418

Diamond with certificate has identification name specification for each diamond that is obtained by dividing single raw ore

Abstract (Basic):

... An identification ( ID ) (2) name is provided to each **diamond** (1) that is obtained by dividing a single raw ore. The **diamond** along with ID is specified in a **certificate** (10) and stored in a database.

... Diamond with **certificate** .

...disaster or war devastation is obtained, by accessing the file of common raw ore of **diamond** .

...The figure shows a top view of the **diamond** **certificate** . (Drawing includes non-English language text...)

... **diamond** (1...

... ID (2...

... certificate (10  
Title Terms: DIAMOND ;

15/3,K/6 (Item 3 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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015773893  
WPI Acc No: 2003-836095/200378  
XRAM Acc No: C03-235123

Labeling an article with at least two oligomers that bind to a third substance in the presence of non-binding oligomers is useful to authenticate unique or valuable articles such as works of art, diamonds and jewelry

Patent Assignee: GERSAN ESTAB (GERS-N)

Inventor: SLATER J H; SMITH M P

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
GB 2387437	A	20031015	GB 20028195	A	20020409	200378 B

Priority Applications (No Type Date): GB 20028195 A 20020409

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
GB 2387437	A	18	C12Q-001/68	

... bind to a third substance in the presence of non-binding oligomers is useful to authenticate unique or valuable articles such as works of art, diamonds and jewelry

Abstract (Basic):

... to confirm the presence of A and B on the article or substance, with a number of non-binding oligomers present in excess to render copying of A and B unattractive...

... An INDEPENDENT CLAIM is also included for labeling an article it is wished to authenticate, where a number of unique oligomers have been attached to the article, including two unique target oligomers A ...

... The invention is useful to authenticate unique articles such as works of art, diamonds and jewelry, particularly precious stones, especially rough or polished diamonds, and also to articles of high value of which a number of copies are produced. The invention may also be applied to explosives, aerosols, organic solvents...

Technology Focus:

... B DNA which is amplified by PCR. The article is a precious stone, particularly a diamond.

... Title Terms: DIAMOND ;

15/3,K/7 (Item 4 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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015495182 \*\*Image available\*\*  
WPI Acc No: 2003-557329/200352

XRPX Acc No: N03-442959

Flame marking system for diamond , has magnesium powder sprayed on carrier tape, which is ignited to burn diamond and transfer indicia pattern to diamond

Patent Assignee: BENDERLY D (BEND-I)

Inventor: BENDERLY D

Number of Countries: 001 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20030085983	A1	20030508	US 2000204506	P	20000516	200352 B
			US 2001858846	A	20010516	
US 6662716	B2	20031216	US 2000204506	P	20000516	200382
			US 2001858846	A	20010516	

Priority Applications (No Type Date): US 2000204506 P 20000516; US 2001858846 A 20010516

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 20030085983	A1	5	B41J-002/335	Provisional application US 2000204506

US 6662716 B2 B41F-017/00 Provisional application US 2000204506

Flame marking system for diamond , has magnesium powder sprayed on carrier tape, which is ignited to burn diamond and transfer indicia pattern to diamond

Abstract (Basic):

... is made of a material that is resistant to temperature above the melting point of diamond . The magnesium powder (28) is sprayed on the tape, in a pattern corresponding to the indicia that is to be marked on the diamond , and is ignited to burn the diamond and transfer the indicia pattern to the diamond .

... An INDEPENDENT CLAIM is also included for method of marking diamond .

...For marking machine-readable indicia such as one-or- two dimensional barcode symbols , human-readable indicia such as alphabetical and numerical indicia, logo or image such as certification mark of quality, which are imperceptible to naked eye, in gemstones such as diamond .

...

...The indicia is marked in the diamond on-site at a jewelers' premises without requiring a skilled marking personnel, large sized and...

...The figure shows a sectional view of the apertured tape mounted on the gemstone during marking

...Title Terms: DIAMOND ;

15/3,K/8 (Item 5 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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011303236 \*\*Image available\*\*

WPI Acc No: 1997-281141/199725

XRPX Acc No: N97-232879

Gemstone registration system for classifying and recording information with respect to gemstones for identification - has site computer with

data signal receiving and displaying device, using two dimensional video camera, which is part of light image capture arrangement  
Patent Assignee: OMPHALOS RECOVERY SYSTEMS INC (OMPH-N); GEMPRINT TECHNOLOGIES INC (GEMP-N)

Inventor: LEYDON M; VANIER D J; WALLNER H F

Number of Countries: 072 Number of Patents: 009

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 9717603	A1	19970515	WO 96CA731	A	19961107	199725 B
CA 2162532	A	19970510	CA 2162532	A	19951109	199736
AU 9672748	A	19970529	AU 9672748	A	19961107	199737
ZA 9609394	A	19970923	ZA 969394	A	19961107	199744
GB 2322255	A	19980819	WO 96CA731	A	19961107	199835
			GB 989502	A	19980506	
US 5828405	A	19981027	US 96745361	A	19961108	199850
IL 119576	A	19990509	IL 119576	A	19961106	199926
GB 2322255	B	20000719	WO 96CA731	A	19961107	200036
			GB 989502	A	19980506	
CA 2162532	C	20010130	CA 2162532	A	19951109	200117

Priority Applications (No Type Date): CA 2162532 A 19951109

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
WO 9717603	A1	E	25 G01N-021/87	
Designated States (National): AL AM AT AU AZ BB BG BR BY CH CN CZ DE DK EE ES FI GB GE HU IL IS JP KE KG KP KR KZ LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK TJ TM TR TT UA UG UZ VN				
Designated States (Regional): AT BE CH DE DK EA ES FI FR GB GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG				
CA 2162532	A		G06F-019/00	
AU 9672748	A		G01N-021/87	Based on patent WO 9717603
ZA 9609394	A	27	G06K-000/00	
GB 2322255	A		G01N-021/87	Based on patent WO 9717603
US 5828405	A		H04N-007/18	
IL 119576	A		G01N-021/87	
GB 2322255	B		G01N-021/87	Based on patent WO 9717603
CA 2162532	C	E	G06F-019/00	

Gemstone registration system for classifying and recording information with respect to gemstones for identification...

...Abstract (Basic): laser diode in combination with optical device for producing collimated light beam directed at a **gemstone** fixture. The fixture orientates a **gemstone** relative the collimated light beam. A screen collects and displays the unique light pattern from the **gemstone**. The video camera directed at the screen captures the unique pattern simultaneously, and signal from...

...approval by a user. The computer has user input device to associate characteristics of the **gemstone** producing the image with the digital signal to produce a combined signal. A printer produces a **certificate** identifying the characteristics and reproduces the corrected unique pattern. The computer forms a communication link...

...ADVANTAGE - Site computer evaluates each captured image and actuation control adjusts laser control. Apparatus overcomes **number** of deficiencies with respect to prior art...

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002016937

WPI. Acc No: 1978-29968A/197816

Diamond **abrasive discs** prodn. - using line installation for cold and  
hot compacting of diamond -containing metal powder charge

Patent Assignee: SELEZOV E T (SELE-I)

Inventor: DEDYULYA I I; ROZHENKO A F

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
SU 552136	A	19770411				197816 B

Priority Applications (No Type Date): SU 2169389 A 19750902

Diamond **abrasive discs** prodn...

...using line installation for cold and hot compacting of diamond  
-containing metal powder charge

...Abstract (Basic): Improved quality of the articles and efficiency of the  
process of production of **diamond** abrasive discs in the line  
installation for cold and hot compacting of **diamond** -contg. metal  
powder charge is ensured by modifications to the **design** described in  
Parent Author's **Certificate** No. 233416...

Title Terms: **DIAMOND** ;

?

20/3,K/1 (Item 1 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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013065061 \*\*Image available\*\*  
WPI Acc No: 2000-236933/200020  
XRPX Acc No: N00-177673

Optical scanner with reflected light collector includes holographic optical element which is divided into zones one which controlling outgoing beam and another receives incoming reflected light and focuses it onto photo detector

Patent Assignee: SYMBOL TECHNOLOGIES INC (SYMB-N)

Inventor: LI Y; STERN M; TAN C

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 6029893	A	20000229	US 95447089	A	19950522	200020 B
			US 97876681	A	19970617	

Priority Applications (No Type Date): US 95447089 A 19950522; US 97876681 A 19970617

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

US 6029893 A 15 G06K-007/10 Cont of application US 95447089

Optical scanner with reflected light collector includes holographic optical element which is divided into zones one which controlling outgoing beam and another receives incoming...

Abstract (Basic):

... An optical scanner for scanning a light beam across a target to read optical indicia, the scanner comprises of: a light source for producing the light beam; beam-generation optical elements for shaping and directing the light beam; collector optical elements for collecting and shaping light reflected from the target; a photosensor for detecting a...

... The beam-generation optical elements comprises an optical diffuser configured to shape the light beam, where the optical diffuser comprises a light shaping diffuser comprising a holographic element that accepts incoming light, and homogenizes and redistributes it over a predetermined angular spread. The optical diffuser comprises a number of sections, each section configured to shape the light beam differently from another section. Two of the sections of the optical diffuser have optical characteristics that differ in ways that shape the light beam differently so that the light beam passing through the two sections is given a different beam waist. The scanner is configured for reading indicia in which information is encoded as differences in reflectivity of portions of the indicia...

...For optical scanners...

...techniques may be used. Provide a scanner in which the cross-section of the focused laser spot may easily be controlled during manufacture. Reduces dead decode zone in front of the...

...the scanner. Extends working range and/or high resolution in decoding high density bar code symbols. Improves light collection returned from a target symbol, thereby reducing the size and weight of...

...holographic windows for laser beam scanning. (113c,d,e...

Title Terms: OPTICAL ;

20/3,K/2 (Item 2 from file: 350)

DIALOG(R) File 350:Derwent WPIX  
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010623873 \*\*Image available\*\*

WPI Acc No: 1996-120826/199613

XRPX Acc No: N96-101269

Scanning drive mechanism for information reading device e.g. bar code reader - has rotation drive unit which enables rotation of moving part

Patent Assignee: OLYMPUS OPTICAL CO LTD (OLYU )

Number of Countries: 001 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 8016705	A	19960119	JP 94148301	A	19940629	199613 B
JP 3333049	B2	20021007	JP 94148301	A	19940629	200273

Priority Applications (No Type Date): JP 94148301 A 19940629

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

JP 8016705 A 6 G06K-007/10

JP 3333049 B2 6 G06K-007/10 Previous Publ. patent JP 8016705

Scanning drive mechanism for information reading device e.g. bar code reader...

...Abstract (Basic): The scanning drive mechanism uses **laser** light for scanning **optical symbols** such as bar code. The information notation is read by coding pattern using light radiated from a **laser** diode. The **information reading device** reads the **information** from a reflected light. A permanent magnet provided at the moving part (5), is fixed rotatably at centre point. The **laser** diode and **information reading device** are provided on a substrate (1) at which the fixed part (6) is fixed...

...the fixed part. The elastic body bending correction device maintains superficial rotation by holding the **number** of vibrations of the elastic body. The magnet is attracted by a predetermined torque, using ...

20/3,K/3 (Item 3 from file: 350)

DIALOG(R) File 350:Derwent WPIX  
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010623872 \*\*Image available\*\*

WPI Acc No: 1996-120825/199613

Related WPI Acc No: 1996-120822

XRPX Acc No: N96-101268

Scanning drive mechanism for information reading device e.g. bar code reader - stops braking of rotation operation for moving part by reducing primary side potential of coil to ground potential

Patent Assignee: OLYMPUS OPTICAL CO LTD (OLYU )

Inventor: KASHIMA A; KUBO H; MASHIKO T; NAGANO S; OSANAI A; SUGATA T

Number of Countries: 002 Number of Patents: 003

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 8016704	A	19960119	JP 94148300	A	19940629	199613 B

US 5614705	A	19970325	US 95494490	A	19950626	199718
JP 3542168	B2	20040714	JP 94148300	A	19940629	200446

Priority Applications (No Type Date): JP 94148300 A 19940629; JP 94148247 A 19940629

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 8016704	A		8	G06K-007/10	
US 5614705	A		14	G06K-007/10	
JP 3542168	B2		11	G06K-007/10	Previous Publ. patent JP 8016704

Scanning drive mechanism for information reading device e.g. bar code reader...

...Abstract (Basic): The scanning drive mechanism reads **optical symbols** like bar code. The information notation by coding pattern is read by radiating light from an **optical** source. The information reading device reads the information from the reflecting light. The light radiated from an **optical** source is condensed on a scanning mirror (15). The moving part is equipped with a...

...fixed part. The elastic body bending correction device maintains a superficial rotation and holds the **number** of vibrations of an elastic body. The magnet is attracted by a predetermined torque. The...

...Abstract (Equivalent): a light source for generating a **laser** beam...

...reflection means having an emission mirror unit for reflecting the **laser** beam and emitting the **laser** beam towards an **optical** pattern representing information in a form of a predetermined pattern, and a condensing mirror unit for condensing a reflection beam from said **optical** pattern in a predetermined direction, said condensing mirror unit being integrally formed with said emission...

...said condensing mirror unit, said light receiving surface being located within a range of an **optical** path of the reflection beam received by said condensing mirror unit in such a position...

...unit, and the received reflection beam being converted to an electric signal corresponding to said **optical** pattern...

?

22/3,K/1 (Item 1 from file: 347)  
DIALOG(R) File 347:JAPIO  
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06672906 \*\*Image available\*\*  
SPECTACLE LENS AND ITS PRODUCTION

PUB. NO.: 2000-258732 [JP 2000258732 A]  
PUBLISHED: September 22, 2000 (20000922)  
INVENTOR(s): MIYAZAWA MAKOTO  
APPLICANT(s): SEIKO EPSON CORP  
APPL. NO.: 11-057312 [JP 9957312]  
FILED: March 04, 1999 (19990304)

#### ABSTRACT

PROBLEM TO BE SOLVED: To decrease the **number** of shaping molds by putting concealed **marks** to a concave face.

SOLUTION: The spectacle lens 1 is an inner face progressive multifocus lens of which the convex face 2 is **optically** finished by the shaping mold and the concave face (inner face) 3 is generated with...

...face 2 is a spherical face or rotationally axisymmetric aspherical face. A variety of concealed **marks** are put on the concave face 3. The concave face is **marked** with, for example, two reference position earmarks 41 for indexing a fitting point, a **manufacturer** mark 42 indicating the **manufacturer**, a merchandise mark 43 indicating a merchandise name, a mark 44 indicating an admission diopter, a **design** mark 45 for identifying **design**, etc., by for example, a **diamond** pen, etc. The progressive multifocus spectacle lens 1 applied with the concealed **marks** including the reference position earmarks 41 on the concave face 3 generated by polishing eventually eliminates the need for the transfer of the concealed **marks** by the shaping molds.

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22/3,K/2 (Item 2 from file: 347)  
DIALOG(R) File 347:JAPIO  
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05919568 \*\*Image available\*\*  
MOLDING METHOD FOR RECORDING DISK

PUB. NO.: 10-202668 [JP 10202668 A]  
PUBLISHED: August 04, 1998 (19980804)  
INVENTOR(s): NAKAYAMA MASATOSHI  
ISHIDA TOSHIHIKO  
UEDA KUNIHIRO  
TANABE HIROSHI  
APPLICANT(s): TDK CORP [000306] (A Japanese Company or Corporation), JP  
(Japan)  
APPL. NO.: 10-016317 [JP 9816317]  
FILED: January 12, 1998 (19980112)

JAPIO KEYWORD: R002 ( **LASERS** ); R004 ( **PLASMA** ); R020 ( **VACUUM TECHNIQUES** );  
R102 ( **APPLIED ELECTRONICS** ...

#### ABSTRACT

... same, carrying out the deposit separation on the back of the stamper to form a **diamond** -shaped film to be coated thereon, supporting the stamper in a molding die cavity and...

...SOLUTION: A **diamond** shaped film is formed on the back 8 of a stamper in an ordinary film manufacturing device. As the **diamond** -shaped film is formed on the back 8 of the stamper 1 of a molding...

...1 can be prolonged to a large extent. Also as it is hard to form **marks** on the stamper 1, characteristics of a matrix surface of the stamper 1 are hard...

... is manufactured to achieve the realization of long life of the stamper 1, and a **number** of disks can be manufactured by one stamper 1 to achieve the reduction of the...

22/3,K/3 (Item 3 from file: 347)

DIALOG(R)File 347:JAPIO

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04591560 \*\*Image available\*\*

OPTICAL ELEMENT FORMING DIE AND ITS PRODUCTION

PUB. NO.: 06-263460 [JP 6263460 A]

PUBLISHED: September 20, 1994 (19940920)

INVENTOR(s): HIRABAYASHI KEIJI

APPLICANT(s): CANON INC [000100] (A Japanese Company or Corporation), JP (Japan)

APPL. NO.: 05-049529 [JP 9349529]

FILED: March 10, 1993 (19930310)

JOURNAL: Section: C, Section No. 1288, Vol. 18, No. 664, Pg. 119, December 15, 1994 (19941215)

OPTICAL ELEMENT FORMING DIE AND ITS PRODUCTION

...JAPIO CLASS: Optical Equipment)

#### ABSTRACT

...of glass from a die and the durability of the die by forming a plate-**diamond** polycrystal film on at least the forming surface of the die base material...

... surface of a uniformly scratched die base material 71, and the base material 71 is **etched** through the mask 72 to form a pattern having  $\geq 10\text{nm}$  depth. The mask 72 is then removed, and a plate- **diamond** crystal 73 is formed only on the scratched region by using a raw gas containing 0.01-10% carbon source and in which the ratio (O/C) of **number** of O atoms to that of C atoms is controlled to  $0.5 \leq (O/C) \leq 1.2$ . The crystals 73 are grown and joined to form a **diamond** polycrystal film 74 uniform in crystalline orientation property and having  $\leq 0.2\text{.mu.m}$  surface roughness, and an **optical** element forming die is obtained.

22/3,K/4 (Item 4 from file: 347)

DIALOG(R)File 347:JAPIO

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04496392 \*\*Image available\*\*

SEMICONDUCTOR WAFER

PUB. NO.: 06-140292 [JP 6140292 A]

PUBLISHED: May 20, 1994 (19940520)  
INVENTOR(s): MURAYAMA AKIYO  
APPLICANT(s): MATSUSHITA ELECTRON CORP [000584] (A Japanese Company or Corporation), JP (Japan)  
APPL. NO.: 04-284830 [JP 92284830]  
FILED: October 23, 1992 (19921023)  
JOURNAL: Section: E, Section No. 1593, Vol. 18, No. 442, Pg. 46, August 17, 1994 (19940817)

#### ABSTRACT

... to be accurately measured with a simple device by a method wherein a triangular or diamond -shaped dimension controlling pattern is formed on the surface of the semiconductor wafer where the...

...acute-angled triangle of base length 3.mu.m and height 15.mu.m and marked in white. The base length of the triangle can be set 1.5 to 3...  
... large as the base length. Or, the dimension controlling pattern 6 is, for instance, a diamond -shaped form of width 3.mu.m and height 30.mu.m and marked in white. By this setup, when a semiconductor wafer is not correctly formed in dimensions as designed, the dimensional change is enlarged in a dimension controlling pattern, which is measured by an optical dimension measuring device, and consequently a circuit pattern provided onto a semiconductor wafer can be...

22/3,K/5 (Item 5 from file: 347)  
DIALOG(R)File 347:JAPIO  
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03380224 \*\*Image available\*\*  
MANUFACTURE SYSTEM

PUB. NO.: 03-043124 [JP 3043124 A]  
PUBLISHED: February 25, 1991 (19910225)  
INVENTOR(s): IMAI SHOSAKU  
SHINO HIDEO  
APPLICANT(s): SEIKO EPSON CORP [000236] (A Japanese Company or Corporation), JP (Japan)  
APPL. NO.: 01-175169 [JP 89175169]  
FILED: July 06, 1989 (19890706)  
JOURNAL: Section: M, Section No. 1111, Vol. 15, No. 182, Pg. 35, May 10, 1991 (19910510)

JAPIO KEYWORD:R002 ( LASERS ); R007 (ULTRASONIC WAVES); R064 (MACHINERY...)

#### ABSTRACT

... host computer 3, and the specification of a product produced hereafter is coded to be marked in the lead frame with a laser marker 2. The said code is read with a read part 5, required IC designated by the code is taken out from the IC stocker 6 of diamond touch mlc 4, and diamond touch is made on the lead frame by diamond touch mlc. The condition of wire bonding is set by auto wire bonding mlc 8...

...mlc 14 based on the read of a read part 11, a required item is marked based on a read part 17 in a laser marker 16.

22/3,K/6 (Item 6 from file: 347)  
DIALOG(R)File 347:JAPIO  
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03189501  
BLOCK GAUGE

PUB. NO.: 02-165001 [JP 2165001 A]  
PUBLISHED: June 26, 1990 (19900626)  
INVENTOR(s): KOSUDA TETSUO  
KAMATA YOSHIRO  
TAKIZAWA KINJI  
APPLICANT(s): MITSUTOYO CORP [402556] (A Japanese Company or Corporation),  
JP (Japan)  
APPL. NO.: 63-321275 [JP 88321275]  
FILED: December 19, 1988 (19881219)  
JOURNAL: Section: P, Section No. 1104, Vol. 14, No. 422, Pg. 119,  
September 12, 1990 (19900912)

JAPIO KEYWORD:R002 ( LASERS )

ABSTRACT

...component, 3-7 weight % of Y oxide and 0-20 weight % of Al oxide, and marking said gauge through irradiation of a **laser** light in an ambience of an inert gas...

...and sintered. The obtained ceramic body of Zr (in a lump) is cut by a **diamond** cutter to be a rectangular parallelepiped slightly larger than a predetermined size. The rectangular parallelepiped...

... moreover nominal dimension becomes a given value, which is further shaped into a block gauge. **Laser** beams are cast by a YAG **laser** to the surface of the rectangular parallelepiped where a mark is to be patterned while N<sub>2</sub> gas is blown with a given angle. The nominal dimension, product **number** and trade mark are **marked** .

22/3,K/7 (Item 7 from file: 347)  
DIALOG(R)File 347:JAPIO  
(c) 2005 JPO & JAPIO. All rts. reserv.

02677622 \*\*Image available\*\*  
LIQUID CRYSTAL DISPLAY PANEL

PUB. NO.: 63-294522 [JP 63294522 A]  
PUBLISHED: December 01, 1988 (19881201)  
INVENTOR(s): KIKUCHI ISAKO  
TATEMICHI TOSHIO  
APPLICANT(s): MATSUSHITA ELECTRIC IND CO LTD [000582] (A Japanese Company or Corporation), JP (Japan)  
APPL. NO.: 62-130504 [JP 87130504]  
FILED: May 27, 1987 (19870527)  
JOURNAL: Section: P, Section No. 847, Vol. 13, No. 125, Pg. 111, March 28, 1989 (19890328)

...JAPIO CLASS: Optical Equipment); 44.9 (COMMUNICATION  
JAPIO KEYWORD:R011 (LIQUID CRYSTALS); R012 ( OPTICAL FIBERS); R044 (CHEMISTRY...)

ABSTRACT

... defects such as disconnection and short-circuiting of electrodes by adhesion of dust and defective **etching** with a fewer stages by cutting the patterning of the electrodes by a cutter, thereby...

...26 with the transparent electrodes are then set on an X-Y plotter and a **diamond** cutter is applied thereto to cut the electrodes 23, 24. Oriented films 27 are formed...

... linear polarizing plates 21, 22 are stuck to the outside of the two substrates. The **number** of the stages is thereby decreased and the fine patterning of the inter-electrode arrangement...

22/3,K/8 (Item 8 from file: 347)

DIALOG(R) File 347:JAPIO

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00430979

#### EVALUATING DEVICE FOR INSULATING FILM QUALITY

PUB. NO.: 54-082979 [JP 54082979 A]

PUBLISHED: July 02, 1979 (19790702)

INVENTOR(s): NISHIOKA SUNAO

APPLICANT(s): MITSUBISHI ELECTRIC CORP [000601] (A Japanese Company or Corporation), JP (Japan)

APPL. NO.: 52-150859 [JP 77150859]

FILED: December 14, 1977 (19771214)

JOURNAL: Section: E, Section No. 135, Vol. 03, No. 106, Pg. 52, September 07, 1979 (19790907)

#### ABSTRACT

PURPOSE: To facilitate to count the **number** of the fault occurring on the film when the quality is evaluated for the insulating...

...notch line 12 is provided on one surface of glass plate 10 scribing with the **diamond** tip or through the photo **etching** so that at least one unit of the grid may exist within the viewfield of **optical** microscope 8. Then transparent conducting film 9 is coated on the surface, thus obtaining glass...

22/3,K/9 (Item 1 from file: 350)

DIALOG(R) File 350:Derwent WPIX

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014013017 \*\*Image available\*\*

WPI Acc No: 2001-497231/200155

XRPX Acc No: N01-368493

Laser **system for** marking **precious stones, especially diamonds, creates tiny craters in surface to accuracy of less than one micron**

Patent Assignee: BLS BENELUX LASER SYSTEMS (BLSB-N)

Inventor: CALLENS B.

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
BE 1012499	A6	20001107	BE 99149	A	19990304	200155 B

Priority Applications (No Type Date): BE 99149 A 19990304

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
BE 1012499	A6	F	25	B23K-000/00	

Laser **system for** marking **precious stones, especially diamonds, creates tiny craters in surface to accuracy of less than one micron**

Abstract (Basic):

... The laser generator (2) produces a beam which is expanded (20) and reflected (24) towards the precious...

...The tiny craters formed on the surface of the stone can trace out identification data, logo 's, etc.

... Identification marking of precious stones...

... laser generator (2...

... laser (10...

... diamond (48

Title Terms: LASER ;

22/3,K/10 (Item 2 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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013683833 \*\*Image available\*\*

WPI Acc No: 2001-168046/200117

Related WPI Acc No: 2003-669518

XRAM Acc No: C01-050065

XRXPX Acc No: N01-121187

Fabrication of multilayer microelectronic interconnect structure used in high density interconnects for high performance microelectronic device chips uses a low dielectric constant material, e.g. air as the intralevel dielectric

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC )

Inventor: BUCHWALTER L P; CALLEGARI A C; COHEN S A; GRAHAM T O; HUMMEL J P; JAHNES C V; PURUSHOTHAMAN S; SAENGER K L; SHAW J M

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 6184121	B1	20010206	US 9752174	P	19970710	200117 B
			US 98112919	A	19980709	

Priority Applications (No Type Date): US 9752174 P 19970710; US 98112919 A 19980709

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

US 6184121 B1 18 H01L-021/4763 Provisional application US 9752174

Abstract (Basic):

... a top layer and a lower layer on a semiconductor wafer (10); (ii) patterning and etching trenches for wiring tracks on the top layer and vias in the lower layer; (iii...

...vias with a thick conductive wiring layer metal; (iv) planarizing the wiring layer metal by etching or polishing to achieve a coplanar inlaid structure of conductors and vias embedded as metal...

...v) repeating steps (i-iv) until a requisite number of wiring levels in the interconnect structure are fabricated...

...all areas of the wafer not directly covered by the conductors by means of an etching process while leaving the dielectric material intact under the metal feature...

...viii) annealing the **etched** structure at an elevated temperature in a reducing atmosphere to mitigate any plasma process induced...  
...xi) **etching** terminal vias in the optional barrier layer, insulating cover layer, and the thin conformal passivation...

...The figure shows a schematic sketch of the interconnect structure after terminal vias have been **etched** and terminal pads are deposited to complete the fabrication of the structure...

Technology Focus:

... Preferred Method: The **etching** of the dielectric material is performed only on the top most plane pair of wiring...

...chemical vapor deposition (CVD), or plasma enhanced CVD (PECVD). The patterning as well as the **etching** back of the dielectric layer is by wet chemical **etching**, reactive ion **etching** (RIE), plasma **etching**, plasma assisted **etching**, electron cyclotron resonance plasma **etching**, ion beam assisted **etching**, **laser** ablation, and/or by direct photolithographic patterning. The planarization of the wiring layer metal is by RIE, ion milling, mechanical polishing, chemical-mechanical polishing (CMP), and/or electrochemical **etching**. The annealing of the **etched** structure is done in a reducing environment comprising hydrogen (H<sub>2</sub>) or forming gas which is...

...is selectively applied on the conductors only. The terminal vias are produced by reactive ion **etching** (RIE), plasma **etching**, ion milling, **laser** ablation, or by direct photolithographic patterning of the environmental barrier layer, the laminated cover, and...

...of 20-200 nm. The environmental barrier layer is silicon oxide, silicon nitride, and/or **diamond**-like carbon, 50-1000 nm thick. The terminal metal pads are wire bond pads, solder...

22/3,K/11 (Item 3 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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013321847 \*\*Image available\*\*  
WPI Acc No: 2000-493786/200044  
XRPX Acc No: N00-366602

Optical fiber array element for laser beam printer, has optical fiber holder into which optical fiber is inserted where holder is provided between flat surface of holder and a flat plate  
Patent Assignee: HITACHI KOKI KK (HITO )  
Number of Countries: 001 Number of Patents: 001  
Patent Family:  
Patent No Kind Date Applcat No Kind Date Week  
JP 2000180639 A 20000630 JP 98360576 A 19981218 200044 B

Priority Applications (No Type Date): JP 98360576 A 19981218

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes  
JP 2000180639 A 7 G02B-006/08

Optical fiber array element for laser beam printer, has optical fiber holder into which optical fiber is inserted where holder is provided between flat surface of holder and a flat...

Abstract (Basic):

... The optical fiber array has an optical fibers (3) inserted into optical fiber holder (1) which is provided inbetween flat plate portion (2) and flat surface of holder so as to perform uniform distribution of multiple optical fibers arranged at equal intervals in vertical direction. Multiple auxiliary optical fibers (5) are also inserted in the holder.

... The optical fiber array has a joining material to make the points of some optical fibers which make irradiation and propagation of light emitted from the light source. This V...

...structure of V-groove block is formed by dicing process of Si wafer using anisotropic etching or diamond blade saw of Si wafer, ceramic and glass material. An INDEPENDENT CLAIM is also included for the manufacturing method of optical fiber array element...

...For use as multibeam light source of laser beam printer...

...Since lesser number of components are used, manufacture of optical fiber array accuracy is attained, thereby accumulation of manufacturing error of each component is made...

...The figure shows distribution relationship of optical fiber array and auxiliary optical fiber on the V-groove...

... Optical fiber holder (1...

... Optical fibers (3...

...Auxiliary optical fiber (5

Title Terms: OPTICAL ;

22/3,K/12 (Item 4 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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012899531 \*\*Image available\*\*

WPI Acc No: 2000-071366/200006

XRPX Acc No: N00-055784

De- marking head for removing laser marks from an integrated circuit (IC) package

Patent Assignee: MICRON ELECTRONICS INC (MICR-N)

Inventor: CANELLA R L; IBARRA T T

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 5997388	A	19991207	US 97909187	A	19970811	200006 B

Priority Applications (No Type Date): US 97909187 A 19970811

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5997388	A	19		B24B-007/06	

De- marking head for removing laser marks from an integrated circuit (IC) package

Abstract (Basic):

... from the recess to a magazine (13) by respective vacuum pickup heads (46,84). The number of ICs released from one magazine is controlled by a feed controller (34). The magazines...

...the IC by spray nozzles (64), for cleaning. The abrasive belt has metal bonded, synthetic diamond particles of grit with a size in the range of 6-40 microns...

...Enables controlled removal of package material from a marked surface to maintain a remarking surface. Enables removal of laser marks from 1000-2000 plastic package IC. Enables formation of a distinct mark by maintaining a...

...The figure shows an isometric view of the laser mark removing system

...  
...Title Terms: LASER ;

22/3,K/13 (Item 5 from file: 350)

DIALOG(R)File 350:Derwent WPIX  
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011958589 \*\*Image available\*\*

WPI Acc No: 1998-375499/199832

XRPX Acc No: N98-293617

Corneal layer separating instrument - has transitional section for locating along diameter of optical zone, and semi-circular working tip with inner diameter of 6-8 mm

Patent Assignee: UNIV LUMUMBA (UYLU )

Inventor: BELYAEV V S; DUSHIN N V; FROLOV M A

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
RU 2099034	C1	19971220	RU 9424964	A	19940704	199832 B

Priority Applications (No Type Date): RU 9424964 A 19940704

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
RU 2099034	C1	3		A61F-009/007	

... has transitional section for locating along diameter of optical zone, and semi-circular working tip with inner diameter of 6-8 mm

...Abstract (Basic): The transitional section is designed to lie along the marked diameter of the optical zone, and the working tip is in the shape of a half-ring with an...

...be used to separate the layers of the cornea following an incision made by a diamond -tipped instrument...

...Title Terms: OPTICAL ;

22/3,K/14 (Item 6 from file: 350)

DIALOG(R)File 350:Derwent WPIX  
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011939059 \*\*Image available\*\*

WPI Acc No: 1998-355969/199831

XRPX Acc No: N98-278874

Manufacturing method for optical component e.g. Fresnel lens - involves marking end cutting edge of diamond cutting tool, cutting slope in serrate groove, sending cutting blade end, and cutting vertical surface of serrate groove at least twice

Patent Assignee: OLYMPUS OPTICAL CO LTD (OLYU )

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 10138004	A	19980526	JP 96291506	A	19961101	199831 B

Priority Applications (No Type Date): JP 96291506 A 19961101

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 10138004	A		5	B23B-005/14	

Manufacturing method for optical component e.g. Fresnel lens...

...involves marking end cutting edge of diamond cutting tool, cutting slope in serrate groove, sending cutting blade end, and cutting vertical surface...

...Abstract (Basic): The method involves marking the cutting blade of a diamond cutting tool (2) in front of a rotary Fresnel lens board or a Fresnel lens...

...The end cutting edge (30) of the diamond cutting tool is marked. The slope (15a) in the serrate groove is cut. The cutting blade end (18) is ...

...and the vertical surface (15b) of the serrate groove is cut. The same process of marking, cutting, sending, and cutting are done at least twice...

...prevents elastic deformation of workpiece. Chipping of cutting blade is hardly produced. Offers nearly perfect design performance of optical component. Extends durability of expensive diamond cutting tool...

...Title Terms: OPTICAL ;

22/3,K/15 (Item 7 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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010553120 \*\*Image available\*\*

WPI Acc No: 1996-050073/199606

XRPX Acc No: N96-041978

Engraving of inscription on precious stone e.g. diamond - presenting stone to laser beam, with stone being supported on XY table

Patent Assignee: SATIENRAPAT P (SATI-I); HAKOUNE M R (HAKO-I)

Inventor: HAKOUNE M R

Number of Countries: 003 Number of Patents: 003

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
AU 9520365	A	19951214	AU 9520365	A	19950530	199606 B
BE 1008387	A6	19960402	BE 94549	A	19940602	199620
CN 1137431	A	19961211	CN 95107187	A	19950602	199805 N

Priority Applications (No Type Date): BE 94549 A 19940602; CN 95107187 A 19950602

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
AU 9520365	A	11	B28D-005/00		
BE 1008387	A6	10	C04B-000/00		
CN 1137431	A		B23K-026/08		

Engraving of inscription on precious stone e.g. diamond - ...

...presenting stone to laser beam, with stone being supported on XY table

...Abstract (Basic): itself being displaced along the X and Y axes. The stone is presented to a laser beam having a wavelength of 1064 nanometres reducible to 532 nanometres, with a predetermined surface...

...The focal point of the laser beam is displaced in a Z-plane in order to make the same to coincide...

...the table according to the X- and Y-axis. The stone is presented to the laser beam with a facet disposed in a plane perpendicular to the beam

...

...ADVANTAGE - Allows inscription of one or more symbols to be reliably made on facet of stone using laser of reduced power...

...Title Terms: INSCRIBE ;

22/3,K/16 (Item 8 from file: 350)

DIALOG(R) File 350:Derwent WPIX

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010332254 \*\*Image available\*\*

WPI Acc No: 1995-233946/199531

XRPX Acc No: N95-182373

Polarising filter for IR radiation using diamond membrane - has thin layer of diamond laid onto silicon@ substrate, with aperture created by chemical etching , close to Brewster incidence angle

Patent Assignee: CNRS CENT NAT RECH SCI (CNRS )

Inventor: CHARDONNET C

Number of Countries: 018 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
FR 2714489	A1	19950630	FR 9315702	A	19931227	199531 B
WO 9518394	A1	19950706	WO 94FR1540	A	19941227	199532

Priority Applications (No Type Date): FR 9315702 A 19931227

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
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FR 2714489 A1 18 G02B-005/30

WO 9518394 A1 F 22 G02B-005/30

Designated States (National): JP US

Designated States (Regional): AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE

Polarising filter for IR radiation using diamond membrane...

...has thin layer of diamond laid onto silicon@ substrate, with aperture created by chemical etching , close to Brewster incidence angle

...Abstract (Basic): The device consists of a membrane layer of e.g. diamond , of a thickness approximating to an odd multiple of one-quarter of the wavelength at the centre of the optical waveband to be treated. The typical thickness of the membrane is between 0.4 and ...

...silicon substrate layer, the part of which facing the membrane is then removed by chemical etching . The substrate is of a thickness of about 100 micrometres, with a dia. of several centimetres , and the aperture defined by etching is elliptical in shape with axial dimensions of

the order of a centimetre. A number of membranes may be arranged parallel to each other...  
...Title Terms: DIAMOND ;

22/3,K/17 (Item 9 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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010304905 \*\*Image available\*\*

WPI Acc No: 1995-206165/199527

Related WPI Acc No: 1994-248320

XRAM Acc No: C95-095540

Laser etching appts. for diamond substrates, used for e.g. heat sink material - comprises laser cutter and means for contacting diamond with gaseous material effective to remove carbon@ or inhibit its formation

Patent Assignee: GENERAL ELECTRIC CO (GENE )

Inventor: ANTHONY T R; FLEISCHER J F

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 5419798	A	19950530	US 9364465	A	19930521	199527 B
			US 94248896	A	19940525	

Priority Applications (No Type Date): US 9364465 A 19930521; US 94248896 A 19940525

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5419798	A	E	4	C23F-001/02	Div ex application US 9364465
					Div ex patent US 5334280

Laser etching appts. for diamond substrates, used for e.g. heat sink material...

...comprises laser cutter and means for contacting diamond with gaseous material effective to remove carbon@ or inhibit its formation

...Abstract (Basic): An appts. for laser etching of a diamond article (1) comprises a laser cutter (9) maintained in etching relationship to the article and means for contacting the diamond at the point of etching (13) with a gaseous material effective to remove graphite or inhibit its formation...

...USE - The appts. is used for the laser etching of diamond or synthetic diamond substrates, which are used as a heat sink material for electronic circuitry because of its very high thermal conductivity of diamond. Etched recesses in the surface of the diamond are required for the purpose of mounting chips, diodes, etc...

...ADVANTAGE - The appts. removes any graphite formed on the surface of the diamond during processing or inhibits its formation. No further processing of the diamond is required to remove graphite deposits, c.f. prior art. If the graphite is left on the diamond it can cause short circuits when incorporated into electronic equipment, and if can also decrease the resistance of the heat sink, esp. if a number of graphite-coated regions become connected...

Title Terms: LASER ;

22/3,K/18 (Item 10 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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009680917 \*\*Image available\*\*  
WPI Acc No: 1993-374471/199347  
XRAM Acc No: C93-166135  
XRPX Acc No: N93-289517

Diamond synthesis with good space controllability - by irradiating vapour contg. vaporised carbon cpd. and hydrogen@ to decompose the two components

Patent Assignee: FUJI ELECTRIC MFG CO LTD (FJIE )

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 5279184	A	19931026	JP 9280090	A	19920402	199347 B

Priority Applications (No Type Date): JP 9280090 A 19920402

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 5279184	A	5		C30B-029/04	

Diamond synthesis with good space controllability...

...Abstract (Basic): Mixed vapour comprises a vapourised carbon cpd. and H2. Light having the number of oscillations suitable for decomposing the carbon cpd. and light having the number of oscillations differing by the above number of oscillations and the number of oscillations corresp. to Raman transition of H2 are irradiated at the mixed vapour  
...

...USE/ADVANTAGE - The method synthesises the diamond by chemical vapour deposition. The method etches graphite C using the decomposition of a C source by induction Raman excitation and H2 or O2 efficiently activated by a single laser light source. The result efficiently synthesises the high film diamond by light chemical vapour deposition featuring good space controllability and low temp. application without providing...

Title Terms: DIAMOND ;

22/3,K/19 (Item 11 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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008861808  
WPI Acc No: 1991-365833/199150  
Related WPI Acc No: 1991-365803; 1991-365805  
XRAM Acc No: C91-157740

Novel optically active valerolactone deriv. - for high chiral centre introduction rate used in drugs, cosmetics food additives pesticides, etc

Patent Assignee: ASAHI DENKA KOGYO KK (ASAE )

Inventor: OGASAWARA K; TAKANO S

Number of Countries: 002 Number of Patents: 005

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 3246289	A	19911101	JP 9039323	A	19900220	199150 B
US 5262552	A	19931116	US 91658179	A	19910220	199347
US 5352845	A	19941004	US 91658179	A	19910220	199439
			US 9336887	A	19930325	

US 5504219	A	19960402	US 91658179	A	19910220	199619
			US 9336887	A	19930325	
			US 94243760	A	19940517	
JP 3020980	B2	20000315	JP 9039323	A	19900220	200018

Priority Applications (No Type Date): JP 9039323 A 19900220; JP 9039321 A 19900220; JP 9039322 A 19900220

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 3246289	A		12		
JP 3020980	B2		11	C07D-309/30	Previous Publ. patent JP 3246289
US 5262552	A		22	C07C-046/06	
US 5352845	A		22	C07C-041/08	Div ex application US 91658179 Div ex patent US 5262552
US 5504219	A		19	C07D-309/30	Div ex application US 91658179 Div ex application US 9336887 Div ex patent US 5262552 Div ex patent US 5352845

Novel optically active valerolactone deriv...

...Abstract (Basic): Optically active valerolactone cpd. of formula (I) is new (where R1=a protective gp. for H...

...R3-4 is opt. epoxy together, the stearic configuration in the chiral centre carbon atom marked with + is S- or R-one exclusively and, when the ring carbon atom marked with asterisk is chiral centre C atom, the steric consign. of the chiral centre carbon...

...USE/ADVANTAGE - Provides optically active valerolactone derivs. with a high chiral centre introduction rate capable of mass prodn. Used

...Abstract (Equivalent): Optically active valerolactone cpds. of formula (31) are new: where R31 = hydrogen or hydroxy protecting gp...

...vinyl, ethynyl or phenyl, R33 = hydroxy, and R34 = hydrogen, and the chiral central carbon atoms marked with symbols \* and diamond in formula (31) alternatively have one of an R-configuration or an S-configuration...

... Optically active cpd. of formula (1) is produced by (A) treating an optically active halogenated cpd. of formula (2) with a strong base to obtain an optically active corresponding acetylene alcohol while retaining the chirality, (B) treating this alcohol with a benzene halide of formula (3) to obtain an optically active corresponding ph-acetylene cpd. and (c) reducing the cpd. to obtain (1) while retaining...

...Mfg. an optically active (S)- or (R)-benzoquinonepentane-diol of formula (I) wher R11-13 are each H...

...4C alkyl and the chiral C has R- or S-configuration, comprises: (a) reacting an optically active (S)- or (R)-mevalonolactol of formula (II) and a benzenemagnesium halide of formula (III) where X1 is halogen, R14 is a OH-protecting gp. (b) acylating an optically active corresp. (S)- or (R)-phenylpentanetriol of formula (IV); (c) reducing the optically active (S)- or (R)-phenyl-pentanediester cpd. of formula (V); and (d) removing the protecting gp. R4 with an oxidising agent from optically active (S)- or (R)-phenyl-pentanediol of formula (VI) to obtain cpd. (I)

...Title Terms: OPTICAL ;

22/3,K/20 (Item 12 from file: 350)  
DIALOG(R) File 350:Derwent WPIX  
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008861780

WPI Acc No: 1991-365805/199150  
Related WPI Acc No: 1991-365803; 1991-365833  
XRAM Acc No: C91-157712

New optically active pentane derivs. - obtd. from  
(R)-(plus)-mevalonolactone and useful as intermediates various  
antioxidants

Patent Assignee: ASAHI DENKA KOGYO KK (ASAE )

Inventor: OGASAWARA K; TAKANO S

Number of Countries: 002 Number of Patents: 003

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 3246242	A	19911101	JP 9039321	A	19900220	199150 B
US 5262552	A	19931116	US 91658179	A	19910220	199347
US 5504219	A	19960402	US 91658179	A	19910220	199619
			US 9336887	A	19930325	
			US 94243760	A	19940517	

Priority Applications (No Type Date): JP 9039321 A 19900220; JP 9039322 A 19900220; JP 9039323 A 19900220

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5262552	A	22		C07C-046/06	
US 5504219	A	19		C07D-309/30	Div ex application US 91658179 Div ex application US 9336887 Div ex patent US 5262552 Div ex patent US 5352845

New optically active pentane derivs...

...Abstract (Basic): Optically active (S)- or (R)-pentane cpds. of formula (I) are new: (wherein R1, R2 and...

...acyloxy gp.; R6 = hydroxy gp. or acyloxy gp.. The asymmetric with a "star" carbon atom marked takes either one of S-configuration or R-configuration. USE/ADVANTAGE - The cpds. (I) are

...Abstract (Equivalent): Optically active valerolactone cpds. of formula (31) are new: where R31 = hydrogen or hydroxy protecting gp...

...vinyl, ethynyl or phenyl, R33 = hydroxy, and R34 = hydrogen, and the chiral central carbon atoms marked with symbols \* and diamond in formula (31) alternatively have one of an R-configuration or an S-configuration...

...Mfg. an optically active (S)- or (R)-benzoquinonepentane-diol of formula (I) wher R11-13 are each H...

...4C alkyl and the chiral C has R- or S-configuration, comprises: (a) reacting an optically active (S)- or (R)-mevalonolactol of formula (II) and a benzenemagnesium halide of formula (III) where X1 is halogen, R14 is a OH-protecting gp. (b) acylating an optically active corresp. (S)- or (R)-phenylpentanetriol of formula (IV); (c) reducing the optically active (S)- or (R)-phenyl-pentanediester cpd. of formula (V); and (d) removing the protecting gp. R4 with an oxidising

agent from optically active (S)- or (R)-phenyl-pentanediol of formula (VI) to obtain cpd. (I)  
...Title Terms: OPTICAL ;

22/3,K/21 (Item 13 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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008861778

WPI Acc No: 1991-365803/199150

Related WPI Acc No: 1991-365805; 1991-365833

XRAM Acc No: C91-157710

New optically active hexadecane derivs. - prep'd. from readily available natural phytol

Patent Assignee: ASAHI DENKA KOGYO KK (ASAE )

Inventor: OGASAWARA K; TAKANO S

Number of Countries: 002 Number of Patents: 004

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 3246240	A	19911101	JP 9039322	A	19900220	199150 B
US 5262552	A	19931116	US 91658179	A	19910220	199347
US 5504219	A	19960402	US 91658179	A	19910220	199619
			US 9336887	A	19930325	
			US 94243760	A	19940517	
JP 2888250	B2	19990510	JP 9039322	A	19900220	199924

Priority Applications (No Type Date): JP 9039322 A 19900220; JP 9039321 A 19900220; JP 9039323 A 19900220

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5262552	A	22		C07C-046/06	
US 5504219	A	19		C07D-309/30	Div ex application US 91658179
					Div ex application US 9336887
					Div ex patent US 5262552
					Div ex patent US 5352845
JP 2888250	B2	16		C07C-033/042	Previous Publ. patent JP 3246240

New optically active hexadecane derivs...

...Abstract (Equivalent): Optically active valerolactone cpds. of formula (31) are new: where R31 = hydrogen or hydroxy protecting gp...

...vinyl, ethynyl or phenyl, R33 = hydroxy, and R34 = hydrogen, and the chiral central carbon atoms marked with symbols \* and diamond in formula (31) alternatively have one of an R-configuration or an S-configuration...

...Mfg. an optically active (S)- or (R)-benzoquinonepentane-diol of formula (I) wher R11-13 are each H...

...4C alkyl and the chiral C has R- or S-configuration, comprises: (a) reacting an optically active (S)- or (R)-mevalonolactol of formula (II) and a benzenemagnesium halide of formula (III) where X1 is halogen, R14 is a OH-protecting gp. (b) acylating an optically active corresp. (S)- or (R)-phenylpentanetriol of formula (IV); (c) reducing the optically active (S)- or (R)-phenyl-pentanediester cpd. of formula (V); and (d) removing the protecting gp. R4 with an oxidising agent from optically active (S)- or (R)-phenyl-pentanediol of formula (VI) to obtain cpd. (I)

...Title Terms: OPTICAL ;

22/3,K/22 (Item 14 from file: 350)  
DIALOG(R) File 350:Derwent WPIX  
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008562731  
WPI Acc No: 1991-066766/199110  
XRAM Acc No: C91-028208  
XRPX Acc No: N91-051677

Forming metallic circuit channels - in which dielectric provided with defined pattern is deposited with meal which is then removed from around the channels by micro-machining

Patent Assignee: IBM CORP (IBMC ); INT BUSINESS MACHINES CORP (IBMC )

Inventor: MIER SCH E F; PARK J M

Number of Countries: 005 Number of Patents: 005

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 415131	A	19910306	EP 90115044	A	19900804	199110 B
JP 3104187	A	19910501	JP 90198093	A	19900727	199124
US 5122439	A	19920616	US 89399058	A	19890828	199227
US 5173392	A	19921222	US 89399058	A	19890828	199302
			US 92863114	A	19920403	
EP 415131	A3	19921119	EP 90115044	A	19900804	199342

Priority Applications (No Type Date): US 89399058 A 19890828; US 92863114 A 19920403

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
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EP 415131	A				
		Designated States (Regional):		DE FR GB	
US 5122439	A	9		G03C-005/00	
US 5173392	A	8		G03C-005/00	Cont of application US 89399058 Cont of patent US 5122439

...Abstract (Basic): microns; (C) depositing metal, pref. copper, onto (II) and in the circuit channels; and (E) **micromachining**, pref. micromilling, the metal to remove it from above (II) leaving metal deposited in the...

...for multi chip packaging. The processes involved in (I) make it possible to eliminate a **number** of steps resulting in significant cost reduction and improved productivity...

...Abstract (Equivalent): Process then comprises (c) **micromachining** the metal to remove metal from above the dielectric while leaving metal deposited in the circuit channels to form the metallic pattern.

**Micromachining** is a single crystal **diamond** cutting to form planar metallic pattern of flatness 1 micron or less over 1m length...

...Formation of a metallic pattern on a substrate comprises providing metal on substrate; **micromachining** metal to specific thickness; depositing a photoresist layer; **etching** the desired metal pattern in the layer using the photoresist as the mask; removing remaining photoresist; depositing dielectric over substrate; and **micromachining** the dielectric layer to the level of the metal using a single crystal **diamond** to provide planar metallic pattern in which flatness is within 1 micron over 1 metal...

22/3,K/23 (Item 15 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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008557165 \*\*Image available\*\*  
WPI Acc No: 1991-061200/199109  
XRAM Acc No: C91-025930  
XRXPX Acc No: N91-047203

**Highly heat-conductive material for insulating heat radiation plate - has matrix with silicon carbide deposited 1st film and diamond deposited 2nd film**

Patent Assignee: IDEMITSU PETROCHEM CO (IDEM )  
Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 3009552	A	19910117	JP 89145977	A	19890607	199109 B

Priority Applications (No Type Date): JP 89145977 A 19890607

... has matrix with silicon carbide deposited 1st film and diamond deposited 2nd film

...Abstract (Basic): The material comprises matrix consisting of thermo-conductive substance contg. needle shape **diamond**. The needle shaped **diamond** is pref. orientated in one direction in the matrix. Thermal conductivity of the substance is...

...USE/ADVANTAGE - The material is used for insulating heat radiation plate for **laser**, diode and power IC. The material with good thermal conductivity can be prep'd. in any...

...gas were introduced into the reaction chamber. Plasma treatment was done for 2 hrs. under **designated** conditions to deposit SiC film on the substrate. Then CO gas, H<sub>2</sub> gas were introduced into the chamber. Plasma treatment was done for 10 hrs. under **designated** conditions for form **diamond** film on the SiC film. Then O<sub>2</sub> was introduced into the chamber for **etching** treatment to form needle shape **diamond** film. Then, pulse CVI was done in the chamber. Then, the substrate was removed by **etching** to obtain the heat radiation plate...

...Title Terms: **DIAMOND** ;

22/3,K/24 (Item 16 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2005 Thomson Derwent. All rts. reserv.

008357519  
WPI Acc No: 1990-244520/199032  
XRAM Acc No: C90-105977  
XRXPX Acc No: N90-189597

**New encapsulant(s) for computer chip and circuit protection - comprises polymeric film or sputtered quartz with aluminium oxide, etc.**

Patent Assignee: ANONYMOUS (ANON )  
Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
RD 315082	A	19900710			199032	B

Priority Applications (No Type Date): RD 90315082 A 19900620

...Abstract (Basic): corrosive atmos. Encapsulants used today are transparent and easy to remove by plasma or wet **etching** so making it easy to reveal chip and wiring **design**. Encapsulation of chips and wiring circuits in hard and impossible to **etch** materials, in wet or dry environments, without raising chip temp. to-level that will totally

... temps. (below 380 deg.C) and they cannot be removed by any means, except by **diamond** grinding, without raising substrate or chip temps. above 1000 deg.C. Deposition of materials can...

...used for quartz sputtering. Also, by adjusting oxygen level during reactive sputtering, one can adjust **optical** transmission of film by changing compsn. to Al or zirconium-rich and so deposit films...

...between them. So chip will be protected from examination of wire interconnects and actual device **design**.

22/3, K/25 (Item 17 from file: 350)

DIALOG(R) File 350:Derwent WPIX

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008262249 \*\*Image available\*\*

WPI Acc No: 1990-149250/199020

XRPX Acc No: N90-115699

Magnetic media containing reference feature - uses reference position to direct read-write head to track zero on medium surface

Patent Assignee: INSITE PERIPHERALS (INSI-N); INSITE PERIPHERALS INC (INSI-N)

Inventor: GODWIN J D; OTIS A B; WILLIAMS R O; WILLIAMS S P

Number of Countries: 009 Number of Patents: 004

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 368269	A	19900516	EP 89120677	A	19891108	199020 B
US 4935835	A	19900619	US 88269779	A	19881110	199027
EP 368269	B1	19950125	EP 89120677	A	19891108	199508
DE 68920821	E	19950309	DE 620821	A	19891108	199515
			EP 89120677	A	19891108	

Priority Applications (No Type Date): US 88269779 A 19881110

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
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EP 368269	A			
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Designated States (Regional): BE DE FR GB IT LU NL SE

EP 368269	B1	E	16	G11B-021/08
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Designated States (Regional): BE DE FR GB IT LU NL SE

DE 68920821	E		G11B-021/08	Based on patent EP 368269
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...Abstract (Basic): a surface that is accessible by a magnetic head. A permanent reference feature is indelibly **marked** on the surface for providing for the magnetic head, a positional reference point. The magnetic...

...permanent reference feature has indentations positioned along a circular track on the surface and a **number** of spacer areas positioned between adjacent indentations...

...data is stored within the spacer areas than within the indentations. A circular track is **inscribed** in the medium surface. The permanent reference feature has equally spaced raised arcuate areas positioned...

...Abstract (Equivalent): feature track (14), characterised in that said circular magnetic medium (30) comprises a plurality of **optical servo** tracks (16, 16', 16'') positioned on said first surface (23) for providing servo positioning information to an **optical servo** transducer (60), in that said depressions (26, 44) have substantially the same width (w...

...magnetic read/write transducer (76) a positional reference track centre area (78) relative to said **optical servo** tracks and for producing said variable amplitude pattern as a waveform (90) having a...

...Abstract (Equivalent): compsn. is grown on a lattice mismatched support of a second compsn. by: providing a **diamond** cubic or Zn blend structure support; growing a cubic Zn blend buffer film on support...

...growth of cubic III-V and II-VI and I-VIII cpd. semiconductor materials on **diamond** cubic or Zn blend structure substrate...

22/3, K/26 (Item 18 from file: 350)

DIALOG(R) File 350:Derwent WPIX

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007763993

WPI Acc No: 1989-029105/198904

XRAM Acc No: C89-012835

XRXPX Acc No: N89-022104

Patterning synthesised diamond film - comprises depositing e.g. nickel patterning film, forming diamond film on unmasked area and etching off mask with nitric acid

Patent Assignee: FUJITSU LTD (FUIT )

Number of Countries: 001 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 63303891	A	19881212	JP 87140371	A	19870604	198904 B
JP 95080720	B2	19950830	JP 87140371	A	19870604	199539

Priority Applications (No Type Date): JP 87140371 A 19870604

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
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JP 63303891	A	3			
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JP 95080720	B2	3	C30B-029/04	Based on patent JP 63303891
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Patterning synthesised diamond film...

...comprises depositing e.g. nickel patterning film, forming diamond film on unmasked area and etching off mask with nitric acid

...Abstract (Basic): iron or cobalt film on portions of the surface of a base plate (2). A **diamond** film (4) is then formed on the unmasked portions. The mask is removed (3), and the **diamond** film (4) in the pattern is left on the base plate (2...

...ADVANTAGE - Without drawing appts. e.g. laser beam or ion beam, a **diamond** pattern can be formed. The number of processing steps is reduced and damage caused by etching is avoided...

...In an example, a 10 micron thick **diamond** film (2) was formed over a base plate of high-heat conducting silicon carbide (1). A pattern of nickel film (3) was then deposited on the **diamond** film (10 micron wide stripes, about 1 micron thick). The **diamond** -film deposition was then repeated to form a 10 micron thick patterned **diamond** film (4).

Finally the nickel masking was removed by etching with nitric acid...  
...Title Terms: DIAMOND ;

22/3,K/27 (Item 19 from file: 350)  
DIALOG(R) File 350:Derwent WPIX  
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007288831  
WPI Acc No: 1987-285838/198741  
XRPX Acc No: N87-214241

Web registration control system for multi-colour press - has registration marks on moving web, each mark having part with symmetrical shoes disposed diagonally to motion direction  
Patent Assignee: QUAD TECH INC (QUAD-N); QUAD/TECH INC (QUAD-N)  
Inventor: SAINIO J W

Number of Countries: 014 Number of Patents: 007

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 240950	A	19871014	EP 87104973	A	19870403	198741 B
AU 8771134	A	19871008				198747
US 4887530	A	19891219	US 86849095	A	19860407	199008
US 5076163	A	19911231	US 89391784	A	19890809	199204
EP 240950	B1	19920930	EP 87104973	A	19870403	199240
DE 3781922	G	19921105	DE 3781922	A	19870403	199246
			EP 87104973	A	19870403	
CA 1322291	C	19930921	CA 533739	A	19870402	199344

Priority Applications (No Type Date): US 86849095 A 19860407; US 89391784 A 19890809

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 240950	A	E	98		
				Designated States (Regional):	AT BE CH DE FR GB IT LI LU NL SE
US 4887530	A		40		
EP 240950	B1	E	45	B41F-013/02	
				Designated States (Regional):	AT BE CH DE FR GB IT LI LU NL SE
DE 3781922	G			B41F-013/02	Based on patent EP 240950
CA 1322291	C			B41F-005/06	

... has registration marks on moving web, each mark having part with symmetrical shoes disposed diagonally to motion direction

...Abstract (Basic): The relative positions of marks (202-206) indicating registry between the four printing units which cooperate with the moving web. Optical line scanners are arranged to generate scan signals indicating the markings of the web in respective cells, along a line of a given number of the cells as the web moves relative to the printing units...

...The registration marks are shaped as right angle diamonds .

...

...ADVANTAGE - Register marks anywhere within scan can be viewed so that smaller, less obtrusive marks can be used than have been used previously and errors due to colourimetry changes are

...Abstract (Equivalent): printing units (102-105) include means (116, 117, 118, 119) for placing the respective registration marks (202, 204, 205, 206) on the web (110), the relative positions of the marks (202, 203, 204, 205, 206) being indicative of registry between the printing

units (102-105...

...adjusting the registry of the printing units (102-105), means for scanning (122, 122A) the **marks** (202-206) and generating scanning signals, and means for generating control signals (144, 142, 132) to the registry adjusting means (126) in accordance with the relative positions of the registration **marks** (202, 203, 204, 205, 206); characterised in that: the registration **marks** (202, 203, 204, 205, 206) including a portion having substantially symmetrical sides diagonal to the...

...150, 152), from the scanning signals, a respective point associated with each of the registration **marks** (202, 203, 204, 205, 206) and the means for scanning (122, 122A) operates in a...

...Abstract (Equivalent): error between the respective printing units of a web-fed, four-colour printing press. An **optical** line scanner is disposed over a web to generate signals indicative of the brightness level...

...line transverse to the motion of the web. The respective printing units each generate registration **marks** on the web, the relative positions of which are indicative of the relative cyclical (rotational...

...scan of a strip of the web centered on the expected centre line of registration **marks** produced by the respective printing units. The centre of the respective registration **marks** are determined, and the cyclical (rotational) and transverse (lateral) positions of the printing unit adjusted...

...ADVANTAGE - Smaller, less obtrusive registration **marks** used. (39pp)e  
...

...An **optical** line scanner is disposed over a web to generate signals indicative of the brightness level...

...line transverse to the motion of the web. The respective printing units each generate registration **marks** on the web, the relative positions of which are indicative of the relative cyclical (rotational...

...scan of a strip of the web centred on the expected centre line of registration **marks** produced by the respective printing units. The centres of the respective registration **marks** are determined, and the cyclical (rotational) and transverse (lateral) positions of the printing unit adjusted...

22/3,K/28 (Item 20 from file: 350)

DIALOG(R) File 350:Derwent WPIX

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003586847

WPI Acc No: 1983-D5043K/198311

XRPX Acc No: N83-046024

Score calculator for skittles game - uses optical monitors to form two parallel beams across ball path and reflector forming diagonal beam

Patent Assignee: KOCH H (KOCH-I)

Inventor: KOCH H

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
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DE 3207351 A 19830310

198311 B

Priority Applications (No Type Date): DE 3207351 A 19820302

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes  
DE 3207351 A 6

... uses optical monitors to form two parallel beams across ball path and reflector forming diagonal beam

...Abstract (Basic): The score calculator for a skittles game uses optical monitoring devices forming paths across the board between the delivery end and a pattern marked out at the other end. A ball or disc travels from the delivery end towards the pattern which has scoring positions inside a diamond shaped boundary. The number of balls or discs, their speed and faults such as excess travel and bad alignment...

...An optical device (LS1) projects a beam (S1) across the ball or disc path at the delivery...

...Title Terms: OPTICAL ;

22/3, K/29 (Item 21 from file: 350)

DIALOG(R) File 350:Derwent WPIX

(c) 2005 Thomson Derwent. All rts. reserv.

001892661

WPI Acc No: 1978-C1901A/197811

Optical light guide fibre end preparation - using fibre end mount seating connected to oscillating device via wedge

Patent Assignee: SIEMENS AG (SIEI )

Inventor: GOEHLICH L

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
DE 2640501	A	19780309				197811 B

Priority Applications (No Type Date): DE 2640501 A 19760906

Optical light guide fibre end preparation...

...Abstract (Basic): The optical light guide fibre end preparation has a fibre end mount seating connected to an oscillating device via a wedge. The oscillating device is designed as an electromagnetic, piezoceramic or magnetoresistive converter. The end of the light guide fibre, which...

...The damping device consists of a plate which is covered with velvet or felt. A diamond is used for marking the light guide fibre.

Title Terms: OPTICAL ;

?

File 9:Business & Industry(R) Jul/1994-2005/Jun 16  
(c) 2005 The Gale Group  
File 15:ABI/Inform(R) 1971-2005/Jun 15  
(c) 2005 ProQuest Info&Learning  
File 16:Gale Group PROMT(R) 1990-2005/Jun 16  
(c) 2005 The Gale Group  
File 20:Dialog Global Reporter 1997-2005/Jun 16  
(c) 2005 The Dialog Corp.  
File 47:Gale Group Magazine DB(TM) 1959-2005/Jun 16  
(c) 2005 The Gale group  
File 75:TGG Management Contents(R) 86-2005/Jun W1  
(c) 2005 The Gale Group  
File 80:TGG Aerospace/Def.Mkts(R) 1982-2005/Jun 16  
(c) 2005 The Gale Group  
File 88:Gale Group Business A.R.T.S. 1976-2005/Jun 16  
(c) 2005 The Gale Group  
File 98:General Sci Abs/Full-Text 1984-2004/Dec  
(c) 2005 The HW Wilson Co.  
File 112:UBM Industry News 1998-2004/Jan 27  
(c) 2004 United Business Media  
File 141:Readers Guide 1983-2005/Dec  
(c) 2005 The HW Wilson Co  
File 148:Gale Group Trade & Industry DB 1976-2005/Jun 16  
(c) 2005 The Gale Group  
File 160:Gale Group PROMT(R) 1972-1989  
(c) 1999 The Gale Group  
File 275:Gale Group Computer DB(TM) 1983-2005/Jun 16  
(c) 2005 The Gale Group  
File 264:DIALOG Defense Newsletters 1989-2005/Jun 15  
(c) 2005 The Dialog Corp.  
File 484:Periodical Abs PlusText 1986-2005/Jun W2  
(c) 2005 ProQuest  
File 553:Wilson Bus. Abs. FullText 1982-2004/Dec  
(c) 2005 The HW Wilson Co  
File 570:Gale Group MARS(R) 1984-2005/Jun 16  
(c) 2005 The Gale Group  
File 608:KR/T Bus.News. 1992-2005/Jun 16  
(c) 2005 Knight Ridder/Tribune Bus News  
File 620:EIU:Viewswire 2005/Jun 15  
(c) 2005 Economist Intelligence Unit  
File 613:PR Newswire 1999-2005/Jun 16  
(c) 2005 PR Newswire Association Inc  
File 621:Gale Group New Prod.Annou.(R) 1985-2005/Jun 16  
(c) 2005 The Gale Group  
File 623:Business Week 1985-2005/Jun 09  
(c) 2005 The McGraw-Hill Companies Inc  
File 624:McGraw-Hill Publications 1985-2005/Jun 15  
(c) 2005 McGraw-Hill Co. Inc  
File 634:San Jose Mercury Jun 1985-2005/Jun 15  
(c) 2005 San Jose Mercury News  
File 635:Business Dateline(R) 1985-2005/Jun 15  
(c) 2005 ProQuest Info&Learning  
File 636:Gale Group Newsletter DB(TM) 1987-2005/Jun 16  
(c) 2005 The Gale Group  
File 647:cmp Computer Fulltext 1988-2005/May W5  
(c) 2005 CMP Media, LLC  
File 674:Computer News Fulltext 1989-2005/Jun W2  
(c) 2005 IDG Communications  
File 810:Business Wire 1986-1999/Feb 28  
(c) 1999 Business Wire  
File 813:PR Newswire 1987-1999/Apr 30

(c) 1999 PR Newswire Association Inc

Set	Items	Description
S1	692537	GEMSTONE? OR GEMS OR AMYTHEST OR DIAMOND??
S2	487021	(LOCAT? OR IDENTIF? OR FIND? OR READING OR READS) (3N) (INFORMATION OR INDICIA OR INDICUM)
S3	11732773	MANUFACTURER OR OWNER OR RETAILER OR SELLER?? OR PRODUCER? OR MINE OR COUNTRY(2N)ORIGIN OR BRAND()NAME
S4	15182443	NUMBER OR ID OR (IDENTIFICATION OR CERTIFICATION) () NUMBER??
S5	16094803	LOGO OR SYMBOLS OR DESIGN? OR ALPHANUMERIC OR DATES OR MESSAGES
S6	850279	COORDINATE? OR XY
S7	5421	(AUTHENTICAT? OR CERTIF?) (3N)S1
S8	9861	(PURITY OR QUALITY OR TYPE) (3N)S1
S9	1978	(S1 OR S2) (3N) (SCANNING OR SCANNER OR LASER?)
S10	1482758	NEAR()FIELD()OPTIC?? OR OPTIC?
S11	289	(ETCH? OR MARKING OR MARKS OR MARKED OR INSCRIB?) (3N)S1 (3N- ) (S3 OR S4 OR S5)
S12	4	MICROSCOPIC(3N)S11
S13	153	AU=(PATTON D? OR SPOONHOWER J? OR PATTON, D? OR SPOONHOWER, J?)
S14	12264	MICROMACHIN?
S15	2	RD S12 (unique items)
S16	0	S11(S)S10
S17	0	S11(5N)S2
S18	40	S11(5N) (AUTHENTICAT? OR CERTIF? OR PURITY OR QUALITY OR TYPE)
S19	40	S18 NOT S12
S20	30	S19 NOT PY=>2002
S21	16	RD S20 (unique items)
S22	4055	S1 AND (S13 OR KODAK)
S23	830	S22(S) (S4 OR S5)
S24	830	S23(5N) (S4 OR S5)
S25	0	S1 AND S13

15/3,K/1 (Item 1 from file: 9)  
DIALOG(R)File 9:Business & Industry(R)  
(c) 2005 The Gale Group. All rts. reserv.

02593331 Supplier Number: 24881927 (USE FORMAT 7 OR 9 FOR FULLTEXT)

GemSecure From IGL

(New program provides laser engraving of microscopic serial number for  
diamond identification)

National Jeweler, v 45, n 11, p 108

June 01, 2001

DOCUMENT TYPE: Journal ISSN: 0027-9544 (United States)

LANGUAGE: English RECORD TYPE: Fulltext

WORD COUNT: 159

TEXT:

...diamond to be positively identified anywhere in the world via an international database. Finally, the diamond is laser-engraved with its own permanently inscribed microscopic serial number. The process takes approximately 3-5 days.

...

15/3,K/2 (Item 1 from file: 16)

DIALOG(R)File 16:Gale Group PROMT(R)  
(c) 2005 The Gale Group. All rts. reserv.

06600590 Supplier Number: 55609812 (USE FORMAT 7 FOR FULLTEXT)

The stone diaries. (includes related articles on diamonds) (Canada's  
diamond-selling business) (Industry Overview)

Ferry, Jon

BC Business, v27, n7, p104(6)

July, 1999

Language: English Record Type: Fulltext

Article Type: Industry Overview

Document Type: Magazine/Journal; Trade

Word Count: 2888

... is a valuable fancy-colored pinkish stone, is possibly not.)

\* To guard against theft, same diamonds have microscopic  
identification numbers laser- etched three microns deep on their  
girdles. Diamonds from Canada's north bear a tiny polar bear.

\* Below the one-carat weight, stones...

?

15/7/2 (Item 1 from file: 16)  
DIALOG(R) File 16:Gale Group PROMT(R)  
(c) 2005 The Gale Group. All rts. reserv.

06600590 Supplier Number: 55609812 (THIS IS THE FULLTEXT)  
The stone diaries. (includes related articles on diamonds) (Canada's  
diamond-selling business) (Industry Overview)

Ferry, Jon  
BC Business, v27, n7, p104(6)  
July, 1999

TEXT:

DIAMOND MERCHANT COLIN FERGUSON TAKES US INSIDE THE CLOSED WORLD OF  
DIAMOND-SELLING - AND SHOWS YOU WHAT YOU NEED TO KNOW BEFORE YOU BUY

Ask Australian oil company director Ray Friend and his wife, Mary, what they think of Vancouver and they'll tell you it's a beautiful place, with charming people. In fact, the couple from Hobart, Tasmania decided to buy each other a couple of gold rings here for their coming 50th wedding anniversary. The Friends were staying in the West End, so Mary decided to do some comparison shopping at Saatchi & Saatchi Fine Jewellery & Persian Rugs on Robson Street.

There, she says she talked to the very charming Julio Saatchi who commented on what a nice diamond she was wearing. Mary says it was the 2.15-carat diamond her husband had given her for her 25th wedding anniversary. Saatchi, she says, admired the diamond (in an 18-carat white gold solitaire setting) and noted that the claws holding it in the ring were worn. He suggested Mary have them re-tipped. It was a job he could do for her, if she left it with him. Saatchi & Saatchi appeared to be a well-established operation in a salubrious part of town, so Mary thought nothing of leaving the ring there to be refurbished, even though it was uninsured.

A week later, this past March 15, Mary picked up the ring and after paying \$75 for the re-tipping work met her husband for lunch. The couple had a good look at the ring together. The only problem was that it didn't look right. It looked "a little bit offset." So they immediately had it checked out by a nearby jeweller, Fred Minichiello. "And he just looked at it and said, 'Oh that's not a diamond, that's a bit of paste, that's zircon,'" Mary told BCBusiness.

Zircon, otherwise known as Cubic Zirconia, is a diamond lookalike which does not have the hardness or sparkle of a real diamond. Fearing that someone had pulled the old switcheroo, the Friends called in the police. Then, after confirming Minichiello's finding with a gemologist and consulting with a lawyer, Mary launched a lawsuit against Saatchi & Saatchi for the loss of one of her most cherished possessions. "Not everybody has a \$55,000 ring, do they?"

Saatchi & Saatchi has denied "each and every allegation of fact" in the statement of claim Mary filed in B.C. Supreme Court. Julio Saatchi, son of owner Bob Saatchi, says it's not something he can talk about, except that the retailer is taking the case very seriously. "She's making up a story and it's not a true story and that's as much as I can give you." Saatchi adds: "All I can tell you is that our family has been in this business for the last six generations . . . and we have our reputation and everybody in Vancouver knows Saatchi & Saatchi as an honest jeweller."

Julio Saatchi says customers routinely leave very valuable diamonds at the family-run store, confident they will be secure. "This is a joke, you know, that's more or less, that's all I can say . . . It's a funny joke that some people like to make money out of." (Saatchi refers all further questions to top Vancouver lawyer David Gibbons of legal firm Gibbons Ritchie, who has been busy defending Premier Glen Clark against insinuations arising from perceptions of conflict of interest in the awarding of a lucrative casino licence to pal Dimitrios Pilarinos.)

In this disagreement, none of the allegations by Mrs. Friend has been

proven in court. But the case does serve to illustrate the dangers for both sides - consumer and jeweller - when it comes to dealing with such valuable items. Neither has much protection from the other.

As for the consumer, what should he know about protecting himself? The answer varies, depending on who you talk to. Diamond broker Colin Ferguson, owner of Diamonds Direct International, with offices in Vancouver and Antwerp, has some advice for anyone buying diamonds: be extremely careful. Diamonds are not for dummies. For one thing, Ferguson says, no one needs any qualifications to be a diamond dealer or even a diamond appraiser in Canada. And while diamonds may be a girl's best friend, Ferguson says the business attracts opportunists who are not necessarily anyone's best friend.

In fact, Ferguson advises people not to let their cherished stones out of their sight. He says it is possible to switch a mounted diamond in just half-an-hour. "I think there are a great deal of trustworthy jewellers out there. But don't by any expectation think it's prudent to walk into the corner jeweller and give them your . . . diamond and let them work on it, because really you don't know who you're dealing with." That is why, at his own heavily-secured office in downtown Vancouver, Ferguson lets customers watch through the glass as their diamond rings are being reset or repaired by his jewellers Jason, Richard and Todd.

Ferguson, 38, adds that it is hard, if not impossible, for diamond dealers to properly appraise and value a genuine diamond or almost any other gemstone without taking it out of its mount or setting. "When it's in a setting, it's impossible to tell actual colors, clarity, carat weight, the whole nine yards. It's impossible. How can you weigh a diamond when it's in a setting? How can you judge color? How can you judge clarity? It's impossible to do."

That advice has got Ferguson into hot water with the industry. In fact, when he gave that opinion in a television interview a couple of years ago, Ferguson found himself under investigation by Jewellers Vigilance Canada, an industry-funded watchdog group. "They were calling all over the country, saying that there was an investigation into me. I found about it first from a call from Antwerp."

Ferguson's interview with BCTV itself followed a U.S. television network expose by PrimeTime Live, ABC's investigative news magazine show, which found first-hand evidence of diamond-switching.

Reached by phone in Toronto, Jewellers Vigilance executive coordinator Carla Adams acknowledges that anybody can hang out a shingle as a diamond appraiser in Canada. She also concedes her organization investigated Ferguson, following complaints about his TV appearance. In fact, she says, he infuriated the industry. "Retailers and appraisers got upset with what he was saying because [the interview] was saying jewellers are there to steal your items, so be wary," she says. "And that's untrue and unfair." However, Adams would not discuss the probe's results, claiming they were confidential.

Adams describes diamond-switching as a small problem for the industry. "It's not as major as Colin makes it out to be, I don't think." She adds it is very difficult for consumers to follow Ferguson's advice not to let their diamonds out of their sight. "I'm well aware of one of the top appraisers in Canada and they do not let people into their lab, no matter what."

Jewellers Vigilance fields some 1,000 complaints a year, 65 per cent of which come from consumers, the remainder from the trade itself. (This year, the number of complaints has risen as a result of the appearance of a synthetic diamond called moissanite, manufactured in South Carolina.) The most common complaint her organization handles revolves around jewelry appraisals. Adams herself believes there should be a regulation requiring diamond appraisers to have some certification: "I'm sure it would help, definitely."

Veteran Vancouver diamond dealer Toni Cavelti says he would like to

see jewelry appraisers commit to some kind of testing. But he disagrees that removing diamonds from their settings is the best way to appraise them, as suggested by Ferguson. It may appear to be the best in theory, he says, but diamond removal is generally too impractical and expensive. Also, there's a greater chance of a mixup occurring when a diamond is separated from its mount. "So, no, you don't remove stones," Cavelti says. "It is standard in the industry everywhere internationally; you appraise it in the setting." Besides, Cavelti says, 99 per cent of the people in the industry work very hard to make an honest living.

Cavelti insists he has never personally encountered a case of diamond-switching. "I do not know of even one case in all my years in business where either a competitor or a friend of mine or anybody in the diamond business has actually exchanged a gemstone for another one or cheated a customer in that way, no."

Earlier this year, Cavelti sold his West Georgia Street store to Henry Birks & Sons. But, in the past, he has had customers demand to be present while he removed their stones to put them in new settings. "And my standard answer was, 'If you don't have more faith in me, I don't think we should do business'." Cavelti adds that, if he was to be leery about leaving diamonds with anybody, "it would be with someone upstairs in a nonmarked kind of surrounding, that is where I would be careful."

Ferguson, whose upstairs office is discreetly tucked away in the Rogers Building on Granville Street, denies he is out to attack anyone. His comments to BCTV were simply a response to a reporter's questions. But the industry is prickly and does not take criticism well. In fact, he says he has received several threats, including a death threat earlier this year. Security is a big concern. Diamonds Direct, which houses diamonds worth hundreds of thousands of dollars, is heavily protected. "We're out of the way on purpose," says Ferguson. "We don't put an address in the phone book. We don't see people that we don't know." The office contains two safes weighing a ton apiece, double-doors, bulletproof glass, seismic and motion detectors and other unspecified security measures.

At age 25, Ferguson worked as a photocopier salesman before winding up in the jewelry business. At a desperate stage in his life, he says he literally got down on his knees and begged a South African diamond dealer to give him a stone to sell within 30 days. The dealer was kind enough to oblige. He sold that diamond that day to a jeweller and bought more diamonds with the money. The gamble paid off, and he has never looked back.

Ferguson will not reveal the annual revenue of Diamonds Direct. But he notes it is more than \$1 million annually, the minimum requirement for membership in the Young Entrepreneurs Organization. He says stories about him abound, but insists he has never been in trouble with the law and that the Better Business Bureau of the Lower Mainland of B.C. has never had a complaint about him. It's a fact the BBB confirms.

BBB statistics show that in 1998 the bureau fielded nine complaints about jewellers. As of April of this year, it had received eight complaints. Given that it is an exhausting process to stickhandle your way through the BBB's telephone-answering system, that number of complaints may well represent the tip of a substantial degree of customer dissatisfaction. BBB general manager Valerie MacLean herself notes that, although the number of complaints about jewelry stores is not huge, the complaints themselves tend to be "serious" because the items tend to be valuable and have high sentimental value.

The BBB says it did receive two complaints about Saatchi & Saatchi in 1997 and a further one in 1998. BBB complaint counsellor Ashlene Prasad says none of the complaints involved diamond-switching. However, two involved alleged "misrepresentation" of the quality of the jewelry being sold. "One of them had to do with the grade of the diamond," Prasad says. The third complaint was about "unsatisfactory or poor workmanship" on a diamond ring Saatchi & Saatchi had made. The Robson Street diamond retailer resolved one of the three complaints (about quality). However, two of the

complaints were closed as "unresolved". On June 11 last year, the board of the BBB's complaint committee cancelled the company's membership for violation of the bureau's code of ethics.

The BBB's MacLean confirms the bureau had enough concerns about the business practices of Saatchi & Saatchi for it to refer the case to the BBB's complaints committee. "In this case, the complaints committee terminated the membership of the company. That's the most serious of the four actions that could be taken," MacLean says. She adds that this information is part of the public record.

However, Julio Saatchi maintains the company deliberately dropped its membership in the BBB. "We cancelled it ourself... They were nothing but a headache for us." This followed a complaint from a customer who ordered a diamond engagement ring and then wanted a refund. Says Saatchi: "They wanted to get their money back and, because the ring was custom-made for them, we couldn't refund the money."

Ferguson, who talks of plans to become the world's largest Internet diamond dealer, believes the diamond buyer's best friend is good information - a rather rare commodity.

He thinks the big issue is public accountability: "I think the public has a right to be able to buy diamonds and to know that they're not going to be switched." The Vancouver diamond broker himself is clearly quite outgoing, but he points out that one of the problems with the jewelry business is that for centuries it has been cloaked in secrecy. "I think it's a very jealous industry and it's very thin-skinned."

However, he does think consumers are gradually becoming better informed. "Just the fact that [Mary Friend] chose to take legal action against this jeweller, I think means a lot." He cautions, though, that diamond-switching tends to be very hard to prove.

Meanwhile, Mary Friend says the incident has left her feeling very foolish. Her husband Ray, a director of oil exploration firms Petrolex Energy and Naflex Energy, says it has colored his feelings about Vancouver. "It certainly has put a bad taste in our mouth as far as Vancouver's concerned. But not all of Vancouver. We've loved it here, the people have been delightful. Such a beautiful place."

#### THE DIRT ON DIAMONDS

Fred Cuellar, an author billed as one of America's top diamond experts and advisor on gemstone investment to the Saudi Royal Family, says there are many honest diamond dealers. Unfortunately, there are many dishonest ones too. There are also a lot of myths about diamonds. A diamond, he says, is not necessarily forever. If you don't take care of it, it can chip, fracture or break. Also, diamonds are not very rare. It's just that the numbers on the market are controlled by the big diamond cartels to keep prices artificially high. Says Cuellar: "There are really enough diamonds to give each man, woman and child in the United States a whole cupful."

Diamonds are not even the most expensive gemstones. A top-quality ruby, for example, can be worth more than US\$30,000 a carat. Furthermore, diamonds are not always a girl's best friend. Some women think they are a waste of money. In fact, diamonds are not a particularly good investment for the average person. "For the average Joe, I would recommend buying a diamond for the enjoyment and prestige it brings and don't be too concerned about making a buck," Cuellar advises in his book *How to Buy a Diamond* (Sourcebooks, Naperville, Illinois). Instead, he notes that diamonds are basically an expression of romance, love, glamor, elegance, wealth and refinement. But they are also a commodity from which some dealers try to make as much money as they can, and dishonest ones can fool you in a hundred ways.

#### FAST FACTOIDS

A diamond's color is rated against 23 recognized color graduations, from white D to the less-desired black Z. Unless gauged against a 'master stone' or by Gemological Institute of America, the exact graduation is

subjective; it's literally in the eye of the beholder.

\* Color, clarity, cut, carat weight: DeBeers recognizes 5,000 different grades and permutations. A 'simple' diamond is a misnomer.

\* Like any gem, diamonds can be 'enhanced' - chemicals introduced through tiny laser-bored holes to bleach out inclusions, cleavages or 'feathers' filled with glass epoxy, the surface coated to 'improve' the color, the very color itself changed via the exotic (nuclear bombardment to change the atomic matrix) to the prosaic (a line of indelible blue ink around the diamond's girdle) to alter yellowish or brownish tinges to the more valuable blue-white.

\* One carat weighs 1/142 of an ounce. Conversely, 142 one-carat diamonds weigh one ounce. If flawless D-white, that ounce would wholesale at US\$2.34 million.

\* A cut diamonds true color can only be gauged from the bottom; viewed from the front, you see light reflected from the surroundings. (What you think is a valuable fancy-colored pinkish stone, is possibly not.)

\* To guard against theft, same **diamonds** have **microscopic identification numbers** laser- etched three microns deep on their girdles. **Diamonds** from Canada's north bear a tiny polar bear.

\* Below the one-carat weight, stones are measured in points (100 to the carat). Which makes a small diamond much easier to promote, as against describing it in the somewhat deflating fractions of a carat.

\* A poor cut reduces the diamond's 'fire' and can edge upon fraudulent. Example: deliberately leaving a 'thick' girdle to boost the weight at the expense of the brilliance. Result: a falter but intrinsically less valuable 'swindled' stone.

Jon Ferry is a contributing editor to BCBusiness who doesn't wear diamonds.

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21/3,K/1 (Item 1 from file: 9)  
DIALOG(R)File 9:Business & Industry(R)  
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02613721 Supplier Number: 25044385 (USE FORMAT 7 OR 9 FOR FULLTEXT)  
**Diamond Trade Jumps on the Branding Bandwagon.**  
(New trend toward branding diamonds is discussed)  
National Jeweler, v 45, n 21, p 42(2)  
November 01, 2001  
DOCUMENT TYPE: Journal; Industry Overview ISSN: 0027-9544 (United States)  
LANGUAGE: English RECORD TYPE: Fulltext  
WORD COUNT: 2426

(USE FORMAT 7 OR 9 FOR FULLTEXT)

TEXT:

...to have an exclusive United States distributorship. Cut and polished in Canada by Deton'cho Diamonds, the stones come **inscribed** with a **number** from its **certificate** of authenticity, which is issued by Canada's Northwest Territories government. Tundra Diamonds are also...

21/3,K/2 (Item 2 from file: 9)  
DIALOG(R)File 9:Business & Industry(R)  
(c) 2005 The Gale Group. All rts. reserv.

02597344 Supplier Number: 25012458 (USE FORMAT 7 OR 9 FOR FULLTEXT)  
**Zales Introduces Eight-Sided Diamond**  
(Zales diamond features platinum setting with Zales name engraved on inside of the ring)  
National Jeweler, v 45, n 19, p 22  
October 01, 2001  
DOCUMENT TYPE: Journal ISSN: 0027-9544 (United States)  
LANGUAGE: English RECORD TYPE: Fulltext  
WORD COUNT: 322

(USE FORMAT 7 OR 9 FOR FULLTEXT)

TEXT:

...carat weight of a Zales diamond and provides an independent appraisal of every stone. The **diamond**'s unique **certification number** is laser-**inscribed** on the stone.

In addition, GemEx Systems provides light performance analysis, which explains how well...

21/3,K/3 (Item 3 from file: 9)  
DIALOG(R)File 9:Business & Industry(R)  
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02597331 Supplier Number: 24946770 (USE FORMAT 7 OR 9 FOR FULLTEXT)  
**Ben-Dor's 'Tundra' Stones**  
(M Ben-Dor Diamonds debuts Tundra diamonds, which are mined, cut and polished in the Northwest Territories, Canada)  
National Jeweler, v 45, n 15, p 20  
August 01, 2001  
DOCUMENT TYPE: Journal ISSN: 0027-9544 (United States)  
LANGUAGE: English RECORD TYPE: Fulltext  
WORD COUNT: 401

(USE FORMAT 7 OR 9 FOR FULLTEXT)

TEXT:

...government's stringent standards, are eligible for certification. The document includes a "gemprint" of the **diamonds** and an individual **certificate number** will be laser **inscribed** onto each stone. All Tundra **diamonds** will be dual **certified**, as they will also bear a Gemological Institute of America report certificate.

"The Canadian government...

**21/3,K/4 (Item 4 from file: 9)**  
DIALOG(R)File 9:Business & Industry(R)  
(c) 2005 The Gale Group. All rts. reserv.

02508408 Supplier Number: 24909225 (USE FORMAT 7 OR 9 FOR FULLTEXT)  
**Ekati to 'Brand' Its Diamonds**  
(Diamonds to be laser-inscribed with 'maple leaf' logo)  
Jewelers' Circular-Keystone, v 172, n 7, p 54  
July 2001  
DOCUMENT TYPE: Journal ISSN: 1070-0242 (United States)  
LANGUAGE: English RECORD TYPE: Fulltext  
WORD COUNT: 238

TEXT:

...possibility, says Ekati spokesman Graham Nicholls. Approximately 20 Canadian retailers have agreed to sell the **diamonds**, which will be laser- **inscribed** with Ekati's "maple leaf" logo .

The stones carry three **certificates**. The first, from the AGS lab, documents the diamond's specifications. The second, from the...

**21/3,K/5 (Item 5 from file: 9)**  
DIALOG(R)File 9:Business & Industry(R)  
(c) 2005 The Gale Group. All rts. reserv.

02497374 Supplier Number: 24916236 (USE FORMAT 7 OR 9 FOR FULLTEXT)  
**BHP acquires Dia Met, boosts stake in Ekati**  
(BHP extends takeover bid of Dia Met Minerals; structure of all-share takeover offer; impact of deal)  
Northern Miner, v 87, n 19, p 1+  
July 02, 2001  
DOCUMENT TYPE: Journal ISSN: 0029-3164 (Canada)  
LANGUAGE: English RECORD TYPE: Fulltext  
WORD COUNT: 1511

(USE FORMAT 7 OR 9 FOR FULLTEXT)

TEXT:

...first diamond mine to brand its own premium-quality polished diamonds and also guarantee their **quality** and **country of origin** through government **certification**. Each Ekati-brand **diamond** will be laser-**inscribed** with the Ekati maple leaf logo , the Ekati name and an individual certificate number.

In the year ended Jan. 31, 2001...

21/3,K/6 (Item 6 from file: 9)  
DIALOG(R)File 9:Business & Industry(R)  
(c) 2005 The Gale Group. All rts. reserv.

02429684 Supplier Number: 24823364 (USE FORMAT 7 OR 9 FOR FULLTEXT)  
BHP, DIA MET MINERALS LAUNCH EKATI BRAND DIAMONDS AND GEMS  
(Ekati diamond mining operation of BHP, Dia Met Minerals is first in the  
world to launch branded diamonds)  
AsiaPulse News, p n/a  
April 12, 2001  
DOCUMENT TYPE: Custom Wire (Southern & Eastern Asia)  
LANGUAGE: English RECORD TYPE: Fulltext  
WORD COUNT: 237

(USE FORMAT 7 OR 9 FOR FULLTEXT)

TEXT:  
...With Ekati brand diamonds both the origin and the quality of each  
gemstone is thoroughly **certified**."

He said each Ekati brand **diamond** will be laser **inscribed** with the Ekati  
maple leaf **logo**, the Ekati name and an individual identification and  
certification number.

In addition, each stone will...

21/3,K/7 (Item 1 from file: 15)  
DIALOG(R)File 15:ABI/Inform(R)  
(c) 2005 ProQuest Info&Learning. All rts. reserv.

01681183 03-32173  
**De Beers' brand a gem of an idea**  
Anonymous  
Marketing Week v21n20 PP: 3 Jul 16, 1998  
ISSN: 0141-9285 JRNL CODE: MWE  
WORD COUNT: 476

...TEXT: novel branding idea. Top quality gems are now to receive a De  
Beers marque of **quality**, together with a serial **number**, **inscribed** not  
on the **diamond** itself (which would damage its value) but on a transparent  
film attached to it. At...

21/3,K/8 (Item 1 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
(c) 2005 The Gale Group. All rts. reserv.

09245003 Supplier Number: 80457555 (USE FORMAT 7 FOR FULLTEXT)  
Canada's Growing Diamond Industry, in an Advisory by Industrialinfo.com.  
Business Wire, p4686  
Nov 30, 2001  
Language: English Record Type: Fulltext  
Document Type: Newswire; Trade  
Word Count: 448

... in Canada.  
Canadian diamonds are in increasingly high demand due to consumer  
concerns over illegal **diamonds** from Angola and Sierra Leon. Some of the

diamonds are etched with a tiny polar bear certifying their country of origin as Canada. Diamonds from the Ekati mine are laser inscribed with a trademark maple leaf to indicate their authenticity.

Industrialinfo.com provides daily news related...

21/3,K/9 (Item 2 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
(c) 2005 The Gale Group. All rts. reserv.

06727602 Supplier Number: 56451676 (USE FORMAT 7 FOR FULLTEXT)  
Ashford.com Adds Diamonds to Luxury Retail Site.

PR Newswire, p1457  
Oct 18, 1999  
Language: English Record Type: Fulltext  
Document Type: Newswire; Trade  
Word Count: 830

... EGL) and comes with a 30-day, money-back guarantee.  
Ashford.com is the first retailer of diamonds to offer the grading certificate number and company logo micro inscribed on the girdle of virtually every diamond .5 carats and above. This inscription, which is visible only under high magnification and does...

21/3,K/10 (Item 3 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
(c) 2005 The Gale Group. All rts. reserv.

06546627 Supplier Number: 55379099 (USE FORMAT 7 FOR FULLTEXT)  
Bailey Banks & Biddle Fine Jewelers, a Division of Zale Corporation Offers De Beers Millennium Diamond.  
Business Wire, p0041  
August 9, 1999  
Language: English Record Type: Fulltext  
Document Type: Newswire; Trade  
Word Count: 402

... then cut to the very highest standard and most exacting specifications by master craftsmen. To authenticate each stone, De Beers will inscribe the diamonds with a registered number and the De Beers brandmark name. The unique inscription is only visible using the state...

21/3,K/11 (Item 1 from file: 20)  
DIALOG(R)File 20:Dialog Global Reporter  
(c) 2005 The Dialog Corp. All rts. reserv.

16147753 (USE FORMAT 7 OR 9 FOR FULLTEXT)  
BHP, Dia Met launches Ekati brand of diamonds  
AAP NEWS  
April 12, 2001  
JOURNAL CODE: WAAP LANGUAGE: English RECORD TYPE: FULLTEXT  
WORD COUNT: 262

(USE FORMAT 7 OR 9 FOR FULLTEXT)

... With Ekati brand diamonds both the origin and the quality of each gemstone is thoroughly certified ."

He said each Ekati brand diamond would be laser inscribed with the

Ekati maple leaf logo , the Ekati name and an individual identification and certification number.

In addition, each stone will...

21/3,K/12 (Item 2 from file: 20)

DIALOG(R)File 20:Dialog Global Reporter  
(c) 2005 The Dialog Corp. All rts. reserv.

16118286 (USE FORMAT 7 OR 9 FOR FULLTEXT)

**Ekati(TM) becomes the first diamond mine in the world to brand and certify origin of its own top gemstones**

CANADA NEWswire

April 11, 2001

JOURNAL CODE: WCNW LANGUAGE: English RECORD TYPE: FULLTEXT

WORD COUNT: 681

(USE FORMAT 7 OR 9 FOR FULLTEXT)

... getting. The Ekati(TM) certification process addresses this, guaranteeing without a doubt the origin and **quality** of the **diamonds**."

Each Ekati(TM) brand **diamond** will be laser **inscribed** with the Ekati(TM) "maple leaf" logo , the Ekati(TM) name and an individual identification and certificate number.

Also, each stone will...

21/3,K/13 (Item 3 from file: 20)

DIALOG(R)File 20:Dialog Global Reporter  
(c) 2005 The Dialog Corp. All rts. reserv.

08787390 (USE FORMAT 7 OR 9 FOR FULLTEXT)

**The Florida Times-Union, Jacksonville, Retail Report**

Peralte C. Paul

KRTBN KNIGHT-RIDDER TRIBUNE BUSINESS NEWS ( FLORIDA TIMES-UNION - JACKSONVILLE, FLORIDA)

December 20, 1999

JOURNAL CODE: KFTU LANGUAGE: English RECORD TYPE: FULLTEXT  
WORD COUNT: 447

(USE FORMAT 7 OR 9 FOR FULLTEXT)

... ask for what's called an IGI certificate to come with your purchase and a **diamond** **identification** **number** be **inscribed** into the stone. All **diamonds** that are IGI **certified** are placed on a worldwide database so you can check the authenticity of your purchase...

21/3,K/14 (Item 4 from file: 20)

DIALOG(R)File 20:Dialog Global Reporter  
(c) 2005 The Dialog Corp. All rts. reserv.

02224354 (USE FORMAT 7 OR 9 FOR FULLTEXT)

**Leader: De Beers' brand a gem of an idea**

MARKETING WEEK, p3

July 16, 1998

JOURNAL CODE: FMWK LANGUAGE: English RECORD TYPE: FULLTEXT  
WORD COUNT: 482

(USE FORMAT 7 OR 9 FOR FULLTEXT)

... novel branding idea. Top quality gems are now to receive a De Beers marque of **quality** , together with a serial **number** , **inscribed** not on the **diamond** itself (which would damage its value) but on a transparent film attached to it. At...

21/3,K/15 (Item 1 from file: 553)  
DIALOG(R)File 553:Wilson Bus. Abs. FullText  
(c) 2005 The HW Wilson Co. All rts. reserv.

04569105 H.W. WILSON RECORD NUMBER: BWBA01069105 (USE FORMAT 7 FOR FULLTEXT)

Going to the market.

AUGMENTED TITLE: De Beers' Diamond Trading Company Supplier of Choice plan  
Benson, Steven  
New York Diamonds v. 64 (May 2001) p. 16-20  
LANGUAGE: English  
WORD COUNT: 2778

(USE FORMAT 7 FOR FULLTEXT)

TEXT:

... not new to the marketing game. For several years already it has been branding its **diamonds** as the Premier Gem Collection, **inscribing** a **logo** and the GIA **certificate** number on to the stones. But it is expanding the scope of its downstream activity...

21/3,K/16 (Item 1 from file: 813)  
DIALOG(R)File 813:PR Newswire  
(c) 1999 PR Newswire Association Inc. All rts. reserv.

1197427 CHTU016  
Diamonds Direct, USA Says Knowledge Can Save Consumers Thousands When Purchasing Diamonds During the Holiday Season

DATE: December 9, 1997 13:53 EST WORD COUNT: 778

...letter, from D - colorless - to Z -  
light yellow. Less color is better.

-- Clarity describes the **purity** of the **diamond** , and most **diamonds** contain  
tiny natural **marks** called inclusions. The **number** of inclusions,  
their  
size, nature and location all affect the diamond's clarity grade.  
Most...  
?

21/7/9 (Item 2 from file: 16)  
DIALOG(R) File 16:Gale Group PROMT(R)  
(c) 2005 The Gale Group. All rts. reserv.

06727602 Supplier Number: 56451676 (THIS IS THE FULLTEXT)  
**Ashford.com Adds Diamonds to Luxury Retail Site.**

PR Newswire, p1457  
Oct 18, 1999

TEXT:

Each Diamond GIA or EGL Certified With a 30-Day, Money-Back Guarantee;  
Micro Inscription Provides Lifetime Customer Security  
HOUSTON, Oct. 18 /PRNewswire/ -- Ashford.com (Nasdaq: ASFD), a leading Internet retailer of luxury and premium products, today added diamonds to its retail site, located at <http://www.ashford.com> . Each diamond available on the site is certified by the Gemological Institute of America (GIA) or the European Gemological Laboratory (EGL) and comes with a 30-day, money-back guarantee.

Ashford.com is the first **retailer of diamonds** to offer the grading **certificate number** and company **logo** **micro inscribed** on the girdle of virtually every **diamond** .5 carats and above. This inscription, which is visible only under high magnification and does not detract from the beauty, brilliance or value of the diamond, provides permanent and easy identification for appraisal or verification purposes, and virtually eliminates the possibility of diamond switching. This inscription also allows Ashford.com to keep a permanent record of the customer's diamond in the event of damage or loss and allows the customer to trade in his or her diamond with Ashford.com at later date.

"At Ashford.com, we know what a special event it is to buy a diamond, and we want to make sure that every diamond customer on our site feels confident and comfortable in their purchase," said Kenny Kurtzman, CEO of Ashford.com. "With our team of gemologists and diamond professionals, we offer the highest degree of attention, service, quality and value to our customers. We want to go the extra distance for each customer in his or her diamond purchase, even if it means taking the diamond out of the vault to describe to the customer personally."

Ashford.com has a team of gemologists and experienced diamond professionals, who are available by email, phone and live chat to answer questions and to walk customers through their diamond purchase. In addition, this team of professionals can actually guide a customer's Web browser to display various diamonds as they are being discussed, through the Acuity WebCenter(TM) solution's synchronized browser capability.

Ashford.com keeps an extensive inventory of diamonds on site. This on-site inventory provides customers with a number of benefits, including a huge selection of diamonds, ranging in size from slightly under .5 carats to more than 3.0 carats. Ninety-nine percent of the diamonds offered on Ashford.com are already in stock and ship within 24 hours.

Ashford.com offers the following additional benefits with its diamonds:

-- GIA or EGL certification -- Each stone is certified by the GIA or EGL, the two most widely trusted labs among diamond professionals. These labs guarantee each diamond's color, clarity, cut and carat weight with a certificate of grading. The certificates plot and map the specific "fingerprints" in each diamond.  
-- Diamond display techniques -- A photograph of each diamond is displayed on the site, and customers can compare diamonds side by side

as if they were in a diamond house. Customers can search and view diamonds by shape, quality, size and price.  
-- 30-day money-back guarantee -- The Ashford.com 30-day, money-back guarantee is among the strongest in the industry. If desired, customers can use these 30 days to get their diamond independently

appraised.

-- Complimentary Tiffany(R)-style mounting -- Ashford.com ships each diamond mounted in a beautiful, solid 14-karat white or yellow gold Tiffany(R)-style mounting at no extra charge. To complete this impressive presentation, each mounted solitaire diamond from Ashford.com comes packaged in a beautiful ring box.

-- Complimentary one-year insurance coverage -- Ashford.com automatically provides one year of insurance coverage provided by Jeweler's Mutual on all diamond purchases, protecting customers in

the

case of loss or theft.

by

an independent appraisal lab to determine its replacement value and to

verify that the diamond and grading certificate match.

-- Trade-in policy for Ashford.com diamonds -- Customers can trade in their Ashford.com diamonds at any time and receive full value when purchasing a diamond of 50% greater retail value or more.

-- Complimentary Ashford.com loupe -- Each diamond ships with a standard jeweler's loupe, so that customers can see the diamond's beauty and personalized pedigree.

In related announcements today, Ashford.com also detailed its plans to enter the jewelry category and revealed a partnership with the International Jewelry Design Guild. See

<http://www.ashford.com/presscenter/pressreleases> for details.

About Ashford.com

Ashford.com is an Internet retailer of luxury and premium products. The company's e-commerce site, located at <http://www.ashford.com>, offers more than 10,000 styles of new and vintage watches, fragrances, leather accessories, sunglasses and writing instruments from more than 200 leading brands. Dedicated to creating a comfortable and safe shopping environment, Ashford.com offers customers the Ashford.com Protection Plus(TM) policy, which provides best-in-industry warranties, privacy and security. A member of the Better Business Bureau Online, Ashford.com is headquartered in Houston, Texas.

"Tiffany" is a registered trademark of Tiffany & Co. Ashford.com is not affiliated with Tiffany & Co.

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? t21/7/13

21/7/13 (Item 3 from file: 20)  
DIALOG(R) File 20:Dialog Global Reporter  
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08787390 (THIS IS THE FULLTEXT)  
The Florida Times-Union, Jacksonville, Retail Report  
Peralte C. Paul  
KRTBN KNIGHT-RIDDER TRIBUNE BUSINESS NEWS ( FLORIDA TIMES-UNION -  
JACKSONVILLE, FLORIDA)  
December 20, 1999

UPSCALE, FAMILY EATERY OPENS AT WORLD GOLF VILLAGE: Steaks, fresh vegetables and homemade peach cobbler are just a few of the staples that make up Marvin's Steaks & Barbecue, the restaurant that opened recently at the World Golf Village.

The 170-seat, 5,400-square-foot lakefront restaurant is an upscale, family eatery with a golf theme, said owner Marvin C. Harris Jr. The eatery, which has a full-service bar, also serves ribs, chops, a limited seafood menu and offers catering services.

Harris, a Jacksonville native and a former McDonald's franchise owner in Pompano Beach and Texas, said he settled on the World Golf Village because he sees it as an area that's primed for explosion.

"I see it as another Disney World in a few years," he said. Since the Dec. 2 opening, Marvin said the restaurant has been well received and will add breakfast to the menu next month.

In the meantime, he said he's scouting areas on the Northside and in Ponte Vedra Beach to open two other locations.

ALL THAT GLITTERS: Marilyn Monroe cooed that diamonds are a girl's best friend, but if you're planning on purchasing them online this holiday season, the International Gemmological Institute reminds consumers that a fool and his money are easily parted.

Online diamond buying is a tad riskier because consumers won't necessarily know the history behind an online e-tailer in the way they will a brick-and-mortar store, the IGI says. But there are a few ways to protect yourself from ending up with lump of coal instead of a dazzling rock:

First, when ordering online, always ask for what's called an IGI certificate to come with your purchase and a **diamond identification number** be **inscribed** into the stone. All **diamonds** that are IGI **certified** are placed on a worldwide database so you can check the authenticity of your purchase.

Jerry Ehrenwald, IGI president, said it serves to protect e-tailers as well consumers, because if a return is made, the merchant knows he's getting back what he shipped.

With high-end online jewelry sales being a relatively new segment of Internet retailing, Ehrenwald suggests that consumers should go with sites with which they are familiar. Several established jewelry retailers, such as Tiffany & Co., have Web sites, and some consumers may feel more comfortable with an e-tailer that operates brick-and-mortar stores.

If you're still uncertain about a particular e-tailer or retailer for that matter, try calling the local Better Business Bureau chapter that covers the location where the merchant is based, he said.

CEDAR RIVER FLOWS TO BEACH BOULEVARD: Cedar River Seafood & Oyster Bar has moved to 8550 Beach Blvd., one mile west of Southside Boulevard in the former Jimmie's Buttermilk Chicken.

Copyright 1999 Knight-Ridder/Tribune Business News. Source: World Reporter (Trade Mark) - Knight-Ridder Tribune Business News.

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 (c) 2005 Pira International

Set	Items	Description
S1	196936	GEMSTONE? OR GEMS OR AMYTHEST OR DIAMOND??
S2	54133	(LOCAT? OR IDENTIF? OR FIND? OR READING OR READS) (3N) (INFORMATION OR INDICIA OR INDICUM)
S3	822601	MANUFACTURER OR OWNER OR RETAILER OR SELLER?? OR PRODUCER? OR MINE OR COUNTRY(2N)ORIGIN OR BRAND()NAME
S4	3619137	NUMBER OR ID OR (IDENTIFICATION OR CERTIFICATION) () NUMBER??
S5	5687208	LOGO OR SYMBOLS OR DESIGN? OR ALPHANUMERIC OR DATES OR MESSAGES
S6	490873	COORDINATE? OR XY
S7	244	(AUTHENTICAT? OR CERTIF?) AND S1
S8	30705	(PURITY OR QUALITY OR TYPE) AND S1
S9	4984	(S1 OR S2) (3N) (SCANNING OR SCANNER OR LASER?)
S10	3176657	NEAR()FIELD()OPTIC?? OR OPTIC?
S11	752	(ETCH? OR MARKING OR MARKS OR MARKED OR INSCRIB?) AND S1 AND (S3 OR S4 OR S5)
S12	2	MICROSCOPIC(3N)S11
S13	1214	AU=(PATTON D? OR SPOONOWER J? OR PATTON, D? OR SPOONOWER, J?)
S14	58693	MICROMACHIN?
S15	22	S9 AND S3
S16	20	S15 NOT PY=>2002
S17	15	RD S16 (unique items)
S18	173	S11 AND S10
S19	0	S18 AND (AUTHENTICAT? OR CERTIF?)
S20	0	S18 AND S2
S21	13	S18 AND S14
S22	13	S21 NOT S16
S23	10	S22 NOT PY=>2002
S24	9	RD S23 (unique items)

S25 4 S24 NOT (SEMICONDUCTOR? OR THIN()FILM? OR FILM? OR WAFERS)  
S26 2 RD S12 (unique items)  
S27 0 S13 AND S11  
S28 0 S13 AND S1  
S29 22 (S7 OR S8) AND S6 AND LASER?  
S30 21 S29 NOT PY=>2002  
S31 14 RD S30 (unique items)  
S32 8 S31 NOT (SILICON OR WAFERS OR THIN()FILMS OR FILMS)  
S33 8 S32 NOT (S12 OR S17 OR S25)

17/3,K/1 (Item 1 from file: 2)

DIALOG(R)File 2:INSPEC

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4805753 INSPEC Abstract Number: C9412-3310E-001

**Title: Using laser range data to model tunnel curvature for the automatic guidance of a mining vehicle**

Author(s): Juneau, L.; Huteau, R.; Freedman, P.; Chevrette, G.  
Author Affiliation: Dept. of Electr. & Comput. Eng., Ecole Polytech. de Montreal, Que., Canada

Part vol.2 p.643-8 vol.2  
Publisher: IEEE, New York, NY, USA  
Publication Date: 1993 Country of Publication: USA 2 vol.  
(xviii+viii+982) pp.

ISBN: 0 7803 0908 1  
U.S. Copyright Clearance Center Code: CH3243-3/93/0000-0643\$1.00  
Conference Title: Proceedings of IEEE International Conference on Control and Applications

Conference Sponsor: IEEE Control Syst. Soc  
Conference Date: 13-16 Sept. 1993 Conference Location: Vancouver, BC, Canada

Language: English  
Subfile: C

Abstract: The paper presents an automatic guidance system for semi-structured environments such as **mine** tunnels. This system uses a **laser** range **finder** to obtain **information** about the environment. In order to guide the vehicle properly, a perception system estimates, from...  
...Identifiers: **mine** tunnels

17/3,K/2 (Item 2 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2005 Institution of Electrical Engineers. All rts. reserv.

02728599 INSPEC Abstract Number: B86053265

**Title: Evaluation of multiple up circuit separation techniques**

Author(s): Lichtenberg, L.R.; Muir, T.L.  
Author Affiliation: Motorola Gov. Electron. Group, Scottsdale, AZ, USA  
Conference Title: Proceedings of the 1985 International Symposium on Microelectronics p.235-8

Publisher: Int. Soc. Hybrid Microelectron, Reston, VA, USA  
Publication Date: 1985 Country of Publication: USA xii+594 pp.  
ISBN: 0 930815 13 0  
Conference Sponsor: Int. Soc. Hybrid Microelectron.  
Conference Date: 11-14 Nov. 1985 Conference Location: Anaheim, CA, USA  
Language: English  
Subfile: B

Abstract: Both thick and thin film hybrid microcircuit **producers** use large superstrate ceramics for multiple up production techniques to achieve lower costs in producing...

... of thick or thin film circuits on ceramic substrates. This study evaluated the following processes. **Laser** scribing; **Diamond** sawing; **Diamond** scribing.

17/3,K/3 (Item 1 from file: 8)

DIALOG(R)File 8:Ei Compendex(R)

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03505616 E.I. Monthly No: EI9211140234

**Title:** Surface modification and measurement using a scanning tunneling microscope with a diamond tip.

Author: Bogy, D. B.

Corporate Source: Univ of California, Berkeley, CA, USA

Source: Journal of Tribology, Transactions of the ASME v 114 n 3 Jul 1992 p 493-498

Publication Year: 1992

CODEN: JOTRE9 ISSN: 0742-4787

Language: English

...Abstract: is used to modify and measure the surface of magnetic media disks. A very rugged **diamond** tip allows continued **scanning** after it has severely scratched or punched the surface. Three techniques are used. First a...

...location and depth can be obtained by using a new software developed by the STM **manufacturer** to push the tip into the surface with the piezoelectric scanner. The control of the...

Identifiers: **SCANNING TUNNELING MICROSCOPE; INDENTATION; DIAMOND TIP**

17/3,K/4 (Item 2 from file: 8)

DIALOG(R)File 8:EI Compendex(R)

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03041027 E.I. Monthly No: EI9104046600

**Title:** Dialaser blades from Pianezza.

Author: Veglio, Oreste

Corporate Source: HS Veglio s.r.l., Pianezza, Italy

Source: Industrial Diamond Review v 49 n 534 May 1989 p 213

Publication Year: 1989

CODEN: INDRA9 ISSN: 0019-8145

Language: English

...Abstract: for dry cutting of stone and construction materials, it will only be possible to sell **laser** welded **diamond** saw blades. HS Veglio is selling such blades under the Dialaser **brand name**. Tests conducted on building sites and in industrial laboratories have shown that a laser welded...

17/3,K/5 (Item 3 from file: 8)

DIALOG(R)File 8:EI Compendex(R)

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02344214 E.I. Monthly No: EI8712121606

**Title:** PRECISION DIAMOND MACHINING.

Author: Anon

Source: Industrial Diamond Review v 47 n 520 1987 p 106

Publication Year: 1987

CODEN: INDRA9 ISSN: 0019-8145

Language: ENGLISH

...Abstract: USA, Bryant Symons Co. Ltd. in England, Toyoda Machine Works in Japan and other leading **producers**, for the 'mirror machining' of such components as: computer magnetic memory disc substrates; convex mirrors...

...Descriptors: **Diamond; LASERS, CARBON DIOXIDE**

17/3,K/6 (Item 4 from file: 8)  
DIALOG(R)File 8:EI Compendex(R)  
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02338814 E.I. Monthly No: EI8712121137  
**Title: DIAMONDS BROADEN THE HORIZONS.**  
Author: Herbert, Stan  
Source: Civ Eng (London) Jul 1987 p 41, 43-44  
Publication Year: 1987  
CODEN: CVEGA5 ISSN: 0305-6473  
Language: ENGLISH

...Abstract: by De Beers. These significantly increase the options open to the blademaker and drill bit **manufacturer**. Selection of one diamond abrasive as opposed to another implies both technical and economic considerations...

Identifiers: DIAMOND SYNTHESIS TECHNOLOGY; DIAMOND SAW BLADE; LASER WELDED DIAMOND BLADE; LONG-LIFE DIAMOND BLADES

17/3,K/7 (Item 1 from file: 34)  
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci  
(c) 2005 Inst for Sci Info. All rts. reserv.

03451524 Genuine Article#: PF447 No. References: 72  
**Title: A PRELIMINARY-STUDY OF N-15 N-14 IN OCTAHEDRAL GROWTH FORM DIAMONDS**  
Author(s): BOYD SR; PILLINGER CT  
Corporate Source: UNIV PARIS 07, GEOHIM ISOTOPES STABLES LAB, 4 PL JUSSIEU/F-75251 PARIS 05//FRANCE//; OPEN UNIV, DEPT EARTH SCI/MILTON KEYNES MK7 6AA/BUCKS/ENGLAND/  
Journal: CHEMICAL GEOLOGY, 1994, V116, N1-2 (SEP 1), P43-59  
ISSN: 0009-2541  
Language: ENGLISH Document Type: ARTICLE (Abstract Available)

...Abstract: Australia and North America. The sample set included locations such as Finsch (South Africa), a **mine** which produces diamonds having deltaC-13-values close to -5‰, and Argyle (Australia), a **mine** which produces C-13-depleted diamonds.

The nitrogen within "high-deltaC-13" diamonds (deltaC-13...  
...Identifiers--CARBON ISOTOPIC COMPOSITION; VACUUM MASS-SPECTROMETRY; AR-40-AR-39 LASER PROBE; ECLOGITIC DIAMONDS; SOUTH-AFRICA; CLINOPYROXENE INCLUSIONS; CRETACEOUS KIMBERLITES; NITROGEN ISOTOPES; BASALTIC GLASSES; IRON-METEORITES

17/3,K/8 (Item 1 from file: 94)  
DIALOG(R)File 94:JICST-EPlus  
(c) 2005 Japan Science and Tech Corp(JST). All rts. reserv.

04662284 JICST ACCESSION NUMBER: 00A0695747 FILE SEGMENT: JICST-E  
**Microleakage of Class V Composite Restorations Prepared by Er:YAG Laser.**  
KUSAKA TERUO (1); TAKAMIZU MASAAKI (1); KONO ATSUSHI (1)  
(1) Turumi Univ., Sch. of Dent. Med.  
Nippon Shika Hozongaku Zasshi (Japanese Journal of Conservative Dentistry), 2000, VOL.43, NO.3, PAGE.747-756, FIG.7, TBL.4, REF.32  
JOURNAL NUMBER: Y0096AAL ISSN NO: 0387-2343  
UNIVERSAL DECIMAL CLASSIFICATION: 616.314-083

LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan  
DOCUMENT TYPE: Journal  
ARTICLE TYPE: Original paper  
MEDIA TYPE: Printed Publication

...ABSTRACT: laser etching effect" than cavities prepared with a diamond bur. Both dentin cavities prepared using **laser** and **diamond** bur on the root surface showed similar marginal leakage. On the other hand, gingival dentin...

...methods before restoring with a resin composite, Clearfil AP-X (Kuraray). 1. Mega Bond by **manufacturer**'s directions. 2. 40% phosphoric acid etching before Mega Bond application. 3. Scraping with spoon...

...4. Active priming (40sec) of Mega Bond. 5. Clearfil Liner Bond II (Kuraray) system by **manufacturer**'s directions. After storing in 37.DEG.C. water for 24 hours, the specimens were...

17/3,K/9 (Item 2 from file: 94)  
DIALOG(R)File 94:JICST-EPlus  
(c)2005 Japan Science and Tech Corp(JST). All rts. reserv.

03421133 JICST ACCESSION NUMBER: 97A0939372 FILE SEGMENT: JICST-E  
**Laser cutting. Start of direct sale in Coherent Japan.**  
PUMA HABATO (1)  
(1) Kohirentovjapan  
Sheet Met & Fabr, 1997, VOL.41,NO.10, PAGE.60-61, FIG.3  
JOURNAL NUMBER: F0409ACK ISSN NO: 0918-0699  
UNIVERSAL DECIMAL CLASSIFICATION: 621.9.047/.048 621:658.5  
LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan  
DOCUMENT TYPE: Journal  
ARTICLE TYPE: Commentary  
MEDIA TYPE: Printed Publication

ABSTRACT: In unifying Coherent Co. which was the industrial laser equipment **manufacturer** in Coherent Japan which is Japanese juridical person of this company from the conventional agency...

...field is the development of CO<sub>2</sub> laser and solid-state laser of LD excitation, and " **diamond** CO<sub>2</sub> **laser** " are the representative goods.

17/3,K/10 (Item 1 from file: 95)  
DIALOG(R)File 95:TEME-Technology & Management  
(c) 2005 FIZ TECHNIK. All rts. reserv.

00849015 M95016344567  
**Automatic guidance of a mining vehicle using laser range data: simulation and preliminary experimental results**  
(Automatische Lenkung eines Minenfahrzeugs mit Laser Entfernungsdaten: Simulation und erste experimentelle Ergebnisse)  
Juneau, L; Hurteau, R  
Ecole Polytech., Montreal, CDN  
ISRAM 94, Robotics and Manuf., Recent Trends in Res.; Education, and Applications, Proc. of the 5th Int. Symp. on Robotics and Manuf.: Res., Education, and Applications, Maui, USA, Aug 14-18, 1994  
Document type: Conference paper Language: English  
Record type: Abstract

ISBN: 0-7918-0044-X

ABSTRACT:

An automatic guidance system for semi-structured environments such as mine drift is presented in this paper. This system uses a **laser range finder** to obtain **information** about the environment. A Kalman filter provides estimates of the tunnel curvature and the lateral...

17/3,K/11 (Item 1 from file: 99)  
DIALOG(R)File 99:Wilson Appl. Sci & Tech Abs  
(c) 2005 The HW Wilson Co. All rts. reserv.

1739263 H.W. WILSON RECORD NUMBER: BAST98058434  
**Proposed SMPTE standard for motion-picture film (35-mm)-- manufacturer -printed latent image identification information**  
SMPTE Journal v. 107 no8 (Aug. '98) p. 578-81  
DOCUMENT TYPE: Feature Article ISSN: 0036-1682

**Proposed SMPTE standard for motion-picture film (35-mm)-- manufacturer -printed latent image identification information**

ABSTRACT: The proposed SMPTE standard for Motion-Picture Film (35-mm)-- **Manufacturer -Printed Latent Image Identification Information** is presented. The proposal includes details of scope, normative references...

...general format, human-readable key numbers, machine-readable key numbers, optional-frame index mark, optional **manufacturer - identification information**, and bar code **scanner** and density specifications.

17/3,K/12 (Item 1 from file: 144)  
DIALOG(R)File 144:Pascal  
(c) 2005 INIST/CNRS. All rts. reserv.

13410365 PASCAL No.: 98-0103398  
**Aluminum-based MMC machining with diamond-coated cutting tools**  
DURANTE S; RUTELLI G; RABEZZANA F  
GIVENS John H, ed; MATTHEWS Allan, ed; MITTERER Christian, ed; ROHDE Suzanne L, ed  
Centro Ricerche Fiat, 50 St. Torino, 10043 Orbassano (TO), Italy; Centro Istituto Lavorazione Metalli, Orbassano (TO), Italy; Metec, Torino, Italy  
Micron Technology, Inc., Boise, ID 83707-0006, United States; Research Centre in Surface Engineering, University of Hull, North Humberside, HU6 7RX, United Kingdom; Institute fuer Metallkunde und Werkstoffkunde, Montanuniversitaet Leoben, Leoben, Austria; University of Nebraska, 255 Walter Scott Engineering Center, Lincoln, NE 68588-065, United States  
American Vacuum Society. Vacuum Metallurgy and Thin Films Division, United States.  
ICMCTF'97 International Conference on Metallurgical Coatings and Thin Films, 24 (San Diego, California USA) 1997-04-21  
Journal: Surface & coatings technology, 1997, 94-95 (1-3) 632-640  
Language: English

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... weight savings will lead to a reduction in the fuel consumption and environment impact. Automotive **producers** are testing prototypes in Al-MMCs such as brake disk and drum, callipers, piston and...

English Descriptors: Coatings; Surface treatment; Composite material;

Aluminium base alloys; Dispersion strengthened metal; Synthetic diamond ; Cutting tool; Machining; Scanning electron microscopy; Experimental study

17/3,K/13 (Item 1 from file: 583)  
DIALOG(R)File 583:Gale Group Globalbase(TM)  
(c) 2002 The Gale Group. All rts. reserv.

09126617  
Lasers and x-rays force the pace of diamond mining  
BOTSWANA: **DIAMOND MINING TO USE LASERS /X-RAYS**  
Financial Times (FT) 01 July 1999 p. 36  
Language: ENGLISH

BOTSWANA: **DIAMOND MINING TO USE LASERS /X-RAYS**

... Botswana government and De Beers is to improve the recovery of diamonds from the Jwaneng **mine** at the edge of the Kalahari desert. New technology housed in a building called the...

... staff numbers and mean that staff will not need to touch the ore. The Jwaneng **mine** is expecting to produce 13mn carats a year with the new technology. The Aquarium cost BP 360mn, and De Beers anticipate that the technology will be taken up by other **producers** .

17/3,K/14 (Item 2 from file: 583)  
DIALOG(R)File 583:Gale Group Globalbase(TM)  
(c) 2002 The Gale Group. All rts. reserv.

04036230  
Un petit million de carats...  
WORLD - SYNTHETIC DIAMOND HAS MANY POSSIBLE APPLICATIONS  
Echos (LE) 16 January 1991 p24  
ISSN: 0153-4831  
Language: French

... been selling synthetic diamonds since 1960, has produced diamond films which are purer than natural **diamonds** , ten times more **laser** -resistant and 50% better at conducting heat. The Californian company Crystallume is selling glass with...

... to use them for cutting tools, and a De Beers subsidiary is among the European **producers** of synthetic diamonds.

17/3,K/15 (Item 1 from file: 483)  
DIALOG(R)File 483:Newspaper Abs Daily  
(c) 2005 ProQuest Info&Learning. All rts. reserv.

05809961 SUPPLIER NUMBER: 47370871  
**MILLENNIUM GEAR ISN'T FOR THE AGES**  
Ryan, Suzanne C  
Boston Globe, p D1  
Dec 21, 1999  
ISSN: 0743-1791 NEWSPAPER CODE: BOST  
DOCUMENT TYPE: LIV; Newspaper article  
LANGUAGE: English RECORD TYPE: ABSTRACT

...ABSTRACT: number 2000. Bailey Banks & Biddle has a "millennium ring" - a solitaire with "2000" inscribed by **laser** within the **diamond**. Inside the band is a "2" inscribed alongside three inlaid diamonds. But that doesn't...

...has proven to be correct." The multicolored sweaters and beaded evening tops have been "good **sell ers** , " she says. A spokeswoman for Bailey Banks & Biddle says it expects to sell out its...  
?

25/3,K/1 (Item 1 from file: 2)

DIALOG(R) File 2:INSPEC

(c) 2005 Institution of Electrical Engineers. All rts. reserv.

6674101 INSPEC Abstract Number: A2000-18-4240E-011, B2000-09-4350-035  
Title: CVD diamond transmissive diffractive optics for CO/sub 2/  
lasers

Author(s): Kononenko, V.V.; Konov, V.I.; Pimenov, S.M.; Prokhorov, A.M.;  
Pavelyev, V.S.; Soifer, V.A.

Author Affiliation: Gen. Phys. Inst., Moscow, Russia  
Journal: New Diamond and Frontier Carbon Technology vol.10, no.2 p.  
97-107

Publisher: MYU,

Publication Date: 2000 Country of Publication: Japan

CODEN: NDFTFF ISSN: 1344-9931

SICI: 1344-9931(2000)10:2L.97:DTDO;1-H

Material Identity Number: H380-2000-005

Language: English

Subfile: A B

Copyright 2000, IEE

Title: CVD diamond transmissive diffractive optics for CO/sub 2/  
lasers

Abstract: Results of the development of CVD diamond transmissive  
diffractive optical elements (DOEs) for CO/sub 2/ lasers are reported.  
The technique of laser ablation patterning of a diamond surface was  
applied to create a given phase microrelief on mechanically polished  
diamond plates. Micropatterning was performed using a KrF excimer laser (lambda =248 nm). Multilevel spherical (focal...

... in good agreement with the results of calculations. The diffraction  
efficiency of the developed CVD diamond diffractive optical elements  
was found to be only 1-2% lower than the theoretical value.

...Descriptors: diamond ; ...

...diffractive optical elements...

...laser beam etching ; ...

... micromachining ; ...

... optical fabrication...

... optical focusing

Identifiers: CVD diamond ; ...

...transmissive diffractive optical elements...

... diamond surface...

...mechanically polished diamond plates...

...laser micromachining ; ...

... etching depth...

...computer design ;

25/3,K/2 (Item 2 from file: 2)

DIALOG(R) File 2:INSPEC

(c) 2005 Institution of Electrical Engineers. All rts. reserv.

6557659 INSPEC Abstract Number: B2000-05-4145-017

**Title: Production possibilities of microoptics with excimer laser radiation**

Author(s): Tonshoff, H.K.; Graumann, C.; Rinke, M.; Hesener, H.; Wais, J.  
Author Affiliation: Laser Zentrum Hannover eV, Germany

Conference Title: MICRO SYSTEM Technologies 98. 6th International Conference on Micro Electro, Opto, Mechanical Systems and Components p. 183-8

Editor(s): Reichl, H.; Obermeier, E.

Publisher: VDE Verlag, Berlin, Germany

Publication Date: 1998 Country of Publication: Germany 756 pp.

ISBN: 3 8007 2421 9 Material Identity Number: XX-1998-03499

Conference Title: Proceedings of MICRO SYSTEM Technologies 98

Conference Date: 1-3 Dec. 1998 Conference Location: Potsdam, Germany

Language: English

Subfile: B

Copyright 2000, IEE

**Abstract:** Currently there is a strong demand for diffractive and refractive **optical** elements (DROE) made from glass. Due to the brittle nature of this material, only a limited **number** of manufacturing methods can be used to machine glass with a sub-micron accuracy. Thus, current glass DROEs are machined mainly by photolithography and **etching**. These methods can be used for series production but is not suitable for the manufacture...

...new laser machining system for material treatment at a wavelength of 193 nm has been **designed** and built. The better absorption of 193 nm compared to 248 nm or larger wavelengths...

... is significantly increased. This ablation technique is well suited for structuring brittle materials such as **diamonds** or glass to receive DROE like gratings, refractive microlenses or lens arrays.

**Descriptors:** diffractive **optical** elements...

...**micro-optics** ; ...

... **micromachining** ; ...

... **optical** fabrication...

... **optical** glass

...Identifiers: diffractive and refractive **optical** element...

... **optical** manufacturing...

... **diamond** ;

25/3,K/3 (Item 3 from file: 2)

DIALOG(R) File 2:INSPEC

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6170096 INSPEC Abstract Number: A1999-07-4285D-002

**Title: Minimizing tool marks in deterministic microgrinding**

Author(s): Yi Li; Gracewski, S.; Funkenbusch, P.; Ruckman, J.

Author Affiliation: Dept. of Mech. Eng., Rochester Univ., NY, USA

Journal: Proceedings of the SPIE - The International Society for Optical

Engineering Conference Title: Proc. SPIE - Int. Soc. Opt. Eng. (USA)  
vol.3429 p.80-8  
Publisher: SPIE-Int. Soc. Opt. Eng,  
Publication Date: 1998 Country of Publication: USA  
CODEN: PSISDG ISSN: 0277-786X  
SICI: 0277-786X(1998)3429L.80:MTMD;1-0  
Material Identity Number: C574-1999-005  
U.S. Copyright Clearance Center Code: 0277-786X/98/\$10.00  
Conference Title: Current Developments in Optical Design and Engineering

VII

Conference Sponsor: SPIE  
Conference Date: 22-23 July 1998 Conference Location: San Diego, CA,  
USA

Language: English

Subfile: A

Copyright 1999, IEE

**Title: Minimizing tool marks in deterministic microgrinding**

**Abstract:** In deterministic microgrinding of glass optics with metal bond diamond ring tools, optical surfaces exhibit residual cutting tool marks that can significantly affect the efficiency of the finish polishing process. The tool marks for spherical surface generation appear as curves that follow contact lines between the tool and workpiece from the center to the edge of the workpiece. The tool marks are circumferentially periodic and the number is typically equal to the k-ratio, i.e. the ratio of grinding tool speed...

... for tool mark generation. For ratios greater than a critical value, the amplitude of tool marks is reduced to a level not detectable by interferometry. The influences of vibration and tool roughness are also discussed. The model presented provides new insight into the generation of tool marks and optimization of deterministic microgrinding processes.

...Descriptors: micromachining ; ...

... optical elements...

... optical fabrication...

... optical glass

...Identifiers: tool marks ; ...

...glass optics ; ...

...metal bond diamond ring tools...

... optical surfaces...

...residual cutting tool marks ; ...

...circumferentially periodic marks ;

25/3,K/4 (Item 4 from file: 2)  
DIALOG(R)File 2:INSPEC

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5638851 INSPEC Abstract Number: A9717-8160-002, B9709-4360-001

**Title: Excimer lasers-a novel tool for material fine and microprocessing of glasses**

Author(s): Pfeufer, V.

Author Affiliation: Lambda Phys. GmbH, Gottingen, Germany

Journal: Glass Science and Technology    vol.70, no.4    p.113-18  
Publisher: Verlag der Deutschen Glastechnischen Gesellschaft,  
Publication Date: April 1997    Country of Publication: Germany  
CODEN: GSTEXX    ISSN: 0946-7475  
SICI: 0946-7475(199704)70:4L.113:ELNT;1-R  
Material Identity Number: D444-97007  
Language: English  
Subfile: A B  
Copyright 1997, FIZ Karlsruhe

...Abstract: more suited for material fine and microprocessing.  
Industrial laser applications include cutting, drilling, welding,  
soldering, **marking**, trimming, coating, alloying, annealing, hardening,  
lithography, etc. Each year thousands of laser systems for material...

... subsequent thermal blast-off of the upper part; sealing glass casings  
containing electronic circuits (transponders); **marking** quartz glasses,  
bulbs and flasks, dyed or coated drinking glasses, cups, etc.; **marking**,  
cutting and drilling **diamonds**. Despite these examples the **number** of  
actual laser applications in the glass industry is limited, and behind each  
of these...

...Descriptors: **micromachining** ; ...

... **optical** fibres

...Identifiers: **marking** ; ...

...quartz glasses **marking** ; ...

... **diamond** cutting...

... **diamond** drilling...

... **optical** fibre grating writing...

... **micromachining** ;

?

26/3,K/1 (Item 1 from file: 144)

DIALOG(R)File 144:Pascal

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16503410 PASCAL No.: 04-0148473

**Comparison of the new W-interchange with conventional interchanges**

**Operational Effects of Geometrics 2003**

THOMPSON Cipriana D; HUMMER Joseph E; KLUCKMAN Roger C

Sabra, Wang and Associates, Inc., 1504 John Avenue, Suite 160, Baltimore, MD 21227, United States; Department of Civil Engineering, North Carolina State University, Raleigh, NC 27695-7908, United States; North Carolina Department of Transportation, 1020 Birch Ridge Drive, Raleigh, NC 27610, United States

Journal: Transportation research record, 2003 (1847) 42-51

Language: English

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English Descriptors: Road traffic; Interchange; Traffic congestion; Traffic flow; Numerical simulation; **Microscopic** model; **Design** criterion; Freeway; Travel time; Capacity; Traffic lights; Timing; Economic aspect; Cost estimation

26/3,K/2 (Item 1 from file: 483)

DIALOG(R)File 483:Newspaper Abs Daily

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06040581 SUPPLIER NUMBER: 55302898

**Off The Cuff Leaders in the world of business share their thoughts on the way we work, spend, and prepare for the future.**

Anonymous

Christian Science Monitor, p 14

Jun 19, 2000

NEWSPAPER CODE: CSM

; Newspaper article

LANGUAGE: English RECORD TYPE: ABSTRACT

...ABSTRACT: packaging, a suede portfolio, and a certificate from an independent laboratory. And the diamond gets **inscribed** with a [ **microscopic** ] serial **number** .

?

33/3,K/1 (Item 1 from file: 2)

DIALOG(R)File 2:INSPEC

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6890338 INSPEC Abstract Number: A2001-10-6250-002

Title: Structural phase transitions in Sr<sub>2</sub>/Fe<sub>2</sub>O<sub>5</sub> under high pressure

Author(s): Adler, P.; Schwarz, U.; Syassen, K.; Milner, A.P.; Pasternak, M.P.; Hanfland, M.

Author Affiliation: Max-Planck-Inst. fur Festkorperforschung, Stuttgart, Germany

Journal: Journal of Solid State Chemistry vol.155, no.2 p.381-8

Publisher: Academic Press,

Publication Date: Dec. 2000 Country of Publication: USA

CODEN: JSSCBI ISSN: 0022-4596

SICI: 0022-4596(200012)155:2L.381:SPTS;1-T

Material Identity Number: J178-2001-001

U.S. Copyright Clearance Center Code: 0022-4596/2000/\$35.00

Language: English

Subfile: A

Copyright 2001, IEE

...Abstract: by angle-dispersive synchrotron X-ray powder diffraction and /sup 57/Fe Mossbauer spectroscopy using diamond anvil cell techniques. Between 11 and 14 GPa the low-pressure brownmillerite- type structure with an equal number of octahedrally and tetrahedrally coordinated Fe<sup>3+</sup> sites is transformed into a tetragonal perovskite-like structure. The Mossbauer spectra...

...an intensity ratio of about 3:1. The Mossbauer parameters are consistent with two five- coordinated Fe<sup>3+</sup> sites differing in the degree of structural distortion of the FeO<sub>5</sub> polyhedra. Laser annealing of the high-pressure phase at 15 GPa induces a transformation from the tetragonal ...

...brownmillerite structure to 10 in the Sr<sub>2</sub>/Mn<sub>2</sub>O<sub>5</sub>- type phase.

...Descriptors: laser beam annealing

...Identifiers: diamond anvil cell techniques...

...brownmillerite- type structure...

...five- coordinated Fe<sup>3+</sup> sites...

... laser annealing

33/3,K/2 (Item 2 from file: 2)

DIALOG(R)File 2:INSPEC

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03780593 INSPEC Abstract Number: A91013214

Title: Effect of iron on the crystal structure of (Mg,Fe)SiO<sub>3</sub> perovskite

Author(s): Kudoh, Y.; Prewitt, C.T.; Finger, L.W.; Darovskikh, A.; Ito, E.

Author Affiliation: Geophys. Lab., Carnegie Inst. of Washington, DC, USA

Journal: Geophysical Research Letters vol.17, no.10 p.1481-4

Publication Date: Sept. 1990 Country of Publication: USA

CODEN: GPRLAJ ISSN: 0094-8276

U.S. Copyright Clearance Center Code: 0094-8276/90/90GL-01488\$03.00

Language: English

Subfile: A

...Abstract: O<sub>3</sub>, quenched from 26 GPa and 2173 K in a uniaxial split-sphere- **type** high-pressure apparatus, was studied at the SUNY X3A beamline at the National Synchrotron Light...

... the octahedral site of a perovskite synthesized at 50 GPa and 2000 K in a **diamond** -anvil cell with **laser** heating.

...Identifiers: uniaxial split-sphere- **type** high-pressure apparatus...  
...six **coordinated** Si site...

33/3,K/3 (Item 1 from file: 6)

DIALOG(R) File 6:NTIS

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1365052 NTIS Accession Number: DE88004000

**Inspection of the Large Optics Diamond Turning Machine**

Patterson, S. R.

Lawrence Livermore National Lab., CA.

Corp. Source Codes: 068147000; 9513035

Sponsor: Department of Energy, Washington, DC.

Report No.: UCRL-97696; CONF-8711122-1

1987 18p

Languages: English Document Type: Conference proceeding

Journal Announcement: GRAI8813; NSA1300

66. meeting of the IMOG Gaging Subgroup, Livermore, CA, USA, 3 Nov 1987.

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NTIS Prices: PC A03/MF A01

**Inspection of the Large Optics Diamond Turning Machine**

The Large Optics Diamond Turning Machine (LODTM) is of stacked slide design, somewhat resembling a bridge **type** **coordinate** measuring machine. In fact, the machine must serve as a measuring machine for the **quality** control steps of workpiece manufacture since there is not currently another method of measuring the...

Descriptors: \*Lathes; Accuracy; Design; Electric Measuring Instruments; Fabrication; **Laser** Mirrors; Optics; Positioning; Stability

33/3,K/4 (Item 2 from file: 6)

DIALOG(R) File 6:NTIS

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1198787 NTIS Accession Number: AD-A157 963/0

**Improvement of Manufacturing Techniques and Quality of Optical Scratch Standards for Fire Control Systems**

(Contractor rept)

Goldgraben, J. R. ; Salerno, J.

Decilog, Inc., Melville, NY.

Corp. Source Codes: 062171000; 392772

Sponsor: Army Armament Research and Development Command, Dover, NJ. Product Assurance Directorate.; Shared Bibliographic Input.

Report No.: ARPAD-CR-85001; SBI-AD-E401 373  
Aug 85 53p  
Languages: English  
Journal Announcement: GRAI8524  
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NTIS Prices: PC A04/MF A01

**Improvement of Manufacturing Techniques and Quality of Optical Scratch Standards for Fire Control Systems**

Manufacture of the Optical Surface Quality Standards (Scratch and Dig) has been a problem since their introduction. The present technique of **diamond** scribing the scratch standard is haphazard mainly because there are no controlling dimensions for the...

...evaluation was conducted of manufacturing techniques that would reliably reproduce the standards. Additionally, work was **coordinated** with the National Bureau of Standards who developed a measuring technique and generated a configuration...

...Descriptors: properties; \*Photomasking; \*Fire control systems; Photolithography; Ion beams; Profilometers; Ion implantation; Diffraction; Electron beams; Lithography; Quality; Radiometry; Scanning; Manufacturing; Visual inspection; Graphs; Standards; Spatial distribution; Frequency; Pilot studies; Fabrication; Acceptance tests; **Lasers**

Identifiers: \*Scratches; MIL-STD-0-13830A; Submasters; **Laser** scribes; MMT (Manufacturing Methods and Technologies Program); NTISDODXA; NTISDODA

33/3,K/5 (Item 3 from file: 6)

DIALOG(R) File 6:NTIS  
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0664121 NTIS Accession Number: UCRL-78780/XAB  
**Microcomputer-Based Electronic Error Corrector Bar for a Numerically-Controlled Machine Tool**  
Lamb, J. W. ; Whelan, H. A.  
California Univ., Livermore. Lawrence Livermore Lab.  
Corp. Source Codes: 9500007  
Sponsor: Energy Research and Development Administration.  
Report No.: CONF-770607-3  
10 Nov 76 10p  
Document Type: Conference proceeding  
Journal Announcement: GRAI7801; NSA0200  
Joint automatic control conference and IEEE Society on Control Systems, San Francisco, California, United States of America (USA), 22 Jun 1977.  
Order this product from NTIS by: phone at 1-800-553-NTIS (U.S. customers); (703) 605-6000 (other countries); fax at (703) 321-8547; and email at [orders@ntis.fedworld.gov](mailto:orders@ntis.fedworld.gov). NTIS is located at 5285 Port Royal Road, Springfield, VA, 22161, USA.  
NTIS Prices: PC A02/MF A01

The production of optical- **quality** surfaces for machined **laser** mirrors demands machining accuracies that are beyond the mechanical limits of even the best machine...

... make corrections every 10 mils for both displacement and straightness errors to a 1 microinch **Diamond** Turning Lathe. The correction is predicted to improve the positional accuracy from 60 microinches to...

Descriptors: \*Laser mirrors; \*Machine tools; Accuracy; Coordinates; Corrections; Errors; Machining; Microprocessors; On-line control systems  
Identifiers: ERDA/420200; ERDA/420300; Numerical control; Diamond wheels; NTISERDA

33/3,K/6 (Item 1 from file: 34)  
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci  
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09345252 Genuine Article#: 393ZG No. References: 20  
**Title: Structural phase transitions in Sr<sub>2</sub>Fe<sub>2</sub>O<sub>5</sub> under high pressure**  
Author(s): Adler P (REPRINT) ; Schwarz U; Syassen K; Milner AP; Pasternak MP; Hanfland M  
Corporate Source: Max Planck Inst Festkorperforsch, Heisenbergstr 1/D-70569 Stuttgart//Germany/ (REPRINT); Max Planck Inst Festkorperforsch, D-70569 Stuttgart//Germany/; Tel Aviv Univ, Sch Phys & Astron, IL-69978 Tel Aviv//Israel/; European Synchrotron Radiat Facil, F-38043 Grenoble//France/  
Journal: JOURNAL OF SOLID STATE CHEMISTRY, 2000, V155, N2 (DEC), P381-388  
ISSN: 0022-4596 Publication date: 20001200  
Publisher: ACADEMIC PRESS INC, 525 B ST, STE 1900, SAN DIEGO, CA 92101-4495 USA  
Language: English Document Type: ARTICLE (ABSTRACT AVAILABLE)

...Abstract: temperature by angle-dispersive synchrotron X-ray powder diffraction and Fe-57 Mossbauer spectroscopy using diamond anvil cell techniques. Between 11 and 14 GPa the low-pressure brownmillerite- type structure with an equal number of octahedrally and tetrahedrally coordinated Fe<sup>3+</sup> sites is transformed into a tetragonal perovskite-like structure. The Mossbauer spectra of the...  
...an intensity ratio of about 3:1, The Mossbauer parameters are consistent with two five- coordinated Fe<sup>3+</sup> sites differing in the degree of structural distortion of the FeO<sub>4</sub> polyhedra, Laser annealing of the high-pressure phase at 15 GPa induces a transformation from the tetragonal...

...Sr<sup>2+</sup> ions has increased from 8 in the brownmillerite structure to 10 in the Sr<sub>2</sub>Mn<sub>2</sub>O<sub>5</sub>- type phase, (C) 2000 Academic Press.

33/3,K/7 (Item 1 from file: 35)  
DIALOG(R)File 35:Dissertation Abs Online  
(c) 2005 ProQuest Info&Learning. All rts. reserv.

833928 ORDER NO: AAD84-02726  
**A MACHINING SYSTEM FOR TURNING NONAXISYMMETRIC SURFACES**  
Author: DOUGLASS, SPIVEY STEVENS  
Degree: PH.D.  
Year: 1983  
Corporate Source/Institution: THE UNIVERSITY OF TENNESSEE (0226)  
Source: VOLUME 44/10-B OF DISSERTATION ABSTRACTS INTERNATIONAL.  
PAGE 3156. 213 PAGES

...demanded by the optics industry. Such reflectors have also been required in high energy gas laser systems used to trigger thermonuclear reactions in experiments connected with advanced electric power generation.

Historically, production of optical pieces of the quality described required many repetitions of selective hand-lapping, polishing and measuring. In the past ten years production of these pieces has been

enhanced by machining with **diamond** cutting tools on precision numerically controlled (NC) turning machines. These machines are capable of generating axisymmetric surfaces competitive in **quality** to those produced by conventional means without the expensive hand-work. This experiment describes the...  
...motor.

A transformation was performed on the parabola to describe the auxiliary slide motion in **coordinates** centered in the off-axis sector. A Fourier expansion resulted in a scheme which permits...

...20 microinches of vibration detracted from the surface finish and denied the use of a **diamond** cutting tool. A structural resonance in the linear motor prevented the use of higher position...

33/3,K/8 (Item 1 from file: 144)  
DIALOG(R) File 144:Pascal  
(c) 2005 INIST/CNRS. All rts. reserv.

14946264 PASCAL No.: 01-0098011  
**Structural phase transitions in Sr SUB 2 Fe SUB 2 O SUB 5 under high pressure**

ADLER P; SCHWARZ U; SYASSEN K; MILNER A P; PASTERNAK M P; HANFLAND M  
Max-Planck-Institut fuer Festkoerperforschung, Heisenbergstr. 1, 70569  
Stuttgart, Germany; School of Physics and Astronomy, Tel Aviv University,  
69978 Tel Aviv, Israel; European Synchrotron Radiation Facility, BP 220,  
38043 Grenoble, France

Journal: Journal of solid state chemistry, 2000, 155 (2) 381-388

Language: English

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... dispersive synchrotron X-ray powder diffraction and SUP 5 SUP 7 Fe Moessbauer spectroscopy using **diamond** anvil cell techniques. Between 11 and 14 GPa the low-pressure brownmillerite- **type** structure with an equal number of octahedrally and tetrahedrally **coordinated** Fe SUP 3 SUP + sites is transformed into a tetragonal perovskite-like structure. The Moessbauer ...

... an intensity ratio of about 3:1. The Moessbauer parameters are consistent with two five- **coordinated** Fe SUP 3 SUP + sites differing in the degree of structural distortion of the FeO SUB 5 polyhedra. **Laser** annealing of the high-pressure phase at 15 GPa induces a transformation from the tetragonal...

...brownmillerite structure to 10 in the Sr SUB 2 Mn SUB 2 O SUB 5 - **type** phase.

...English Descriptors: study; Pressure effects; Very high pressure; Phase transformations; XRD; Crystal structure; Moessbauer effect; Thermal annealing; **Laser** beams; Crystallographic site; Strontium oxides; Iron oxides

...French Descriptors: pression; Tres haute pression; Transformation phase; Diffraction RX; Structure cristalline; Effet Moessbauer; Recuit thermique ; Faisceau **laser** ; Site cristallographique; Strontium oxyde; Fer oxyde; 6150K; 6166F; Sr2Fe2O5; Fe O Sr

?



The World's Foremost Authority in Gemology™

Gemological Institute of America

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[How to Buy a Diamond](#)  
[Diamond Grading Reports](#)  
[- GIA Grading Services](#)  
[GIA Mission Statement](#)

Back to

This is not an endorsement. The information on this page is provided by GIA as a nonprofit service.

No news at this time

**The Wall Street Journal says:**  
 "...Every diamond should come with a grading certificate from an accredited gemological laboratory; the jewelers we talked to agree that the **Gemological Institute of America (GIA)**, an independent nonprofit organization, is the most trustworthy."

**Contact Information:**  
 Gemological Institute of America  
 World Headquarters  
 5345 Armada Dr.  
 Carlsbad, California  
 92008

[www.gia.edu](http://www.gia.edu)

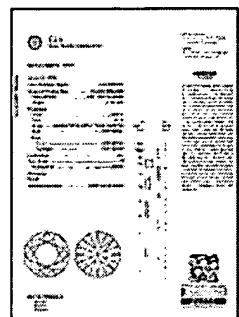
## Diamond Grading Reports

The following examples use GIA documents to show you how to read a diamond grading report. Click on the documents below to interpret each one.

[Guide to the New Generation GIA Diamond Grading Report](#)

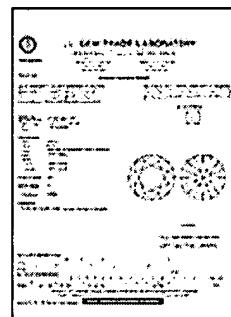
[Guide to the Previous Generation GIA Diamond Grading Report](#)

[Guide to the GIA Diamond Dossier® \(for diamonds under 1 carat on the GIA D-Z Color Scale\)](#)



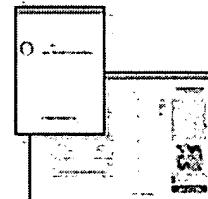
[High Bandwidth](#)

[Low Bandwidth](#)



[High Bandwidth](#)

[Low Bandwidth](#)



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### GIA's "New Generation" Reports:

Beginning January 1, 2000, the GIA Gem Trade Laboratory issued a "new generation" of diamond grading, colored diamond and gemological identification report forms and covers. The entire family of GIA Gem Trade Laboratory Reports features a contemporary design and incorporates security features that exceed document industry security guidelines. GIA will continue to recognize all Reports it has issued these past 50 years. Both versions of the GIA Diamond Grading Report currently in circulation are available for viewing on this site (see above).

While the acquisition of a diamond is the ultimate symbol of love, it also represents a major investment in time, energy and money. You need and deserve to feel confident in your buying decision – and in the *integrity* of what you've acquired.

As the creator of the **International Diamond Grading System**, GIA has literally set the industry standard for diamond grading and gemological identification. The Institute's diamond grading reports are

Tel: (800) 421-7250  
(in the US and Canada)

Or outside the US:  
(760) 603-4000

regarded throughout the international jewelry trade as a hallmark of integrity, reliability, and consistency.

As the Wall Street Journal told its readers, every diamond should come with a grading report. The **GIA Diamond Grading Report** and **GIA Diamond Dossier®** (for diamonds under 1 carat on the GIA D-Z Color Scale) gives you a respected impartial assessment of quality and authenticity.

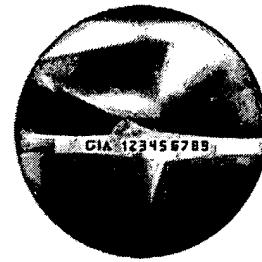
#### **How to Obtain a Diamond Grading Report:**

Buyers and sellers may send their diamonds, colored stones, or pearls to the GIA Gem Trade Laboratory for grading, identification, and inscription services directly or through your favorite professional jeweler. A professional jeweler can help make the submission of your stone a smooth and easy process. They can even arrange for you to have a personal message or unique GIA Diamond Grading Report number laser-inscribed onto the girdle (the diamond's outer edge) of your stone.

#### **Laser Inscription Services:**

Many security-minded consumers select the laser-inscription option when they submit stones for diamond grading. By requesting laser-inscription, consumers enjoy the added benefit of having their diamond inscribed in a way that identifies it as being unmistakably theirs.

Without causing any damage, a micro-laser beam is used to etch a microscopic inscription on the girdle of diamonds weighing 0.18 carat or more. GIA Diamond Grading Report numbers or other information relating to ownership are often inscribed. However, romantic messages like "Forever Yours," and "Always and Forever" have recently been etched onto a diamond's girdle. Poetry, symbols, names and special dates are also popular. Since a message can be read only under magnification, you and your special someone can keep it to yourselves or choose to share it with others. The price of GIA's inscription service is based on the weight of the diamond and the length of the inscription. Typically, up to 15 letters or spaces can be inscribed.



#### **Diamond Registry Services:**

Often, you can enjoy hidden benefits when submitting your stones for grading. For example, GIA's expert graders digitally plot, store, and track all the pertinent information about your diamond – including the stone's inclusions, facet layout and shape. In fact, a diamond's intrinsic information is so unique that it can be likened to a "fingerprint." Thus, if a stone graded by GIA is lost or stolen it can be immediately identified if it is ever re-submitted to the Institute for grading. Because of the Institute's extraordinary database of diamond "fingerprints" (known as GIA's Diamond Registry), the Institute has been able to help law enforcement agencies, such as the FBI and Interpol, solve difficult cases – and retrieve stolen goods.

[\[ back to top \]](#)

File 348:EUROPEAN PATENTS 1978-2005/Jun W02

(c) 2005 European Patent Office

File 349:PCT FULLTEXT 1979-2005/UB=20050609, UT=20050602

(c) 2005 WIPO/Univentio

Set	Items	Description
S1	38363	GEMSTONE? OR GEMS OR AMYTHEST OR DIAMOND??
S2	85216	(LOCAT? OR IDENTIF? OR FIND? OR READING OR READS) (3N) (INFORMATION OR INDICIA OR INDICUM)
S3	140756	MANUFACTURER OR OWNER OR RETAILER OR SELLER?? OR PRODUCER? OR MINE OR COUNTRY(2N)ORIGIN OR BRAND()NAME
S4	1052709	NUMBER OR ID OR (IDENTIFICATION OR CERTIFICATION) () NUMBER??
S5	1319891	LOGO OR SYMBOLS OR DESIGN? OR ALPHANUMERIC OR DATES OR MESSAGES
S6	126258	COORDINATE? OR XY
S7	31	(AUTHENTICAT? OR CERTIF?) (3N)S1
S8	1325	(PURITY OR QUALITY OR TYPE) (3N)S1
S9	1820	(S1 OR S2) (3N) (SCANNING OR SCANNER OR LASER?)
S10	358498	NEAR()FIELD()OPTIC?? OR OPTIC?
S11	41	(ETCH? OR MARKING OR MARKS OR MARKED OR INSCRIB?) (3N)S1(3N-)(S3 OR S4 OR S5)
S12	0	MICROSCOPIC(3N)S11
S13	175	AU=(PATTON D? OR SPOONHOWER J? OR PATTON, D? OR SPOONHOWER, J?)
S14	5481	MICROMACHIN?
S15	261	S10(5N)(S7 OR S8 OR S9)
S16	9	S15(5N)S3:S5
S17	7	S16 NOT PY=>2001
S18	4	S17 NOT (CHECK OR FEE OR RECEIPT)
S19	4	S13 AND S1
S20	4	S19 NOT S18
S21	30	S7 NOT (S19 OR S18)
S22	17	S21 NOT PY=>2002
S23	17	IDPAT (sorted in duplicate/non-duplicate order)
S24	16	IDPAT (primary/non-duplicate records only)
S25	4	S11(S)(S10 OR S14)
S26	3	S25 NOT (S7 OR S19 OR S18)

18/3,K/1 (Item 1 from file: 348)

DIALOG(R) File 348:EUROPEAN PATENTS

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00568940

Optical disc and disc drive apparatus for writing/reading data into/from  
the disc

Optische Platte und Plattengerat zum Aufzeichnen oder Wiedergeben von Daten  
in oder von der Platte

Disque optique et appareil a disques pour enregistrer ou reproduire des  
donnees sur le ou a partir du disque

PATENT ASSIGNEE:

MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD., (216883), 1006, Oaza Kadoma,  
Kadoma-shi, Osaka-fu, 571, (JP), (applicant designated states:  
DE;FR;GB)

INVENTOR:

Satoh, Isao, 36-12, Naritahigashigaoka, Neyagawa-shi, (JP)  
Fukushima, Yoshihisa, 14-C-508 Sekime-6-chome, Joto-ku, (JP)  
Ichinose, Makoto, 4-3-303, Harayamadai-1-cho, Sakai-shi, (JP)  
Kuroki, Yuzuru, 14-6-410, Minowa-2-chome, Toyonaka-shi, (JP)  
Takagi, Yuji, 3-14 Miyukihiigashimachi, Neyagawa-shi, (JP)

LEGAL REPRESENTATIVE:

Votier, Sidney David et al (37081), CARPMAELS & RANSFORD 43, Bloomsbury  
Square, London WC1A 2RA, (GB)

PATENT (CC, No, Kind, Date): EP 542730 A2 930519 (Basic)  
EP 542730 A3 930825  
EP 542730 B1 970730

APPLICATION (CC, No, Date): EP 93200206 870129;

PRIORITY (CC, No, Date): JP 8626374 860207; JP 8626376 860207; JP 8629256  
860213; JP 8638839 860224; JP 8646533 860304; JP 86113934 860519; JP  
86128669 860603

DESIGNATED STATES: DE; FR; GB

RELATED PARENT NUMBER(S) - PN (AN):

EP 232134 (EP 873007892)

INTERNATIONAL PATENT CLASS: G11B-007/013; G11B-007/085; G11B-019/04;  
G11B-020/12; G11B-027/10; G11B-007/007; G11B-007/09;

ABSTRACT WORD COUNT: 233

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF1	637
CLAIMS B	(English)	9707W5	688
CLAIMS B	(German)	9707W5	602
CLAIMS B	(French)	9707W5	837
SPEC A	(English)	EPABF1	6693
SPEC B	(English)	9707W5	6600
Total word count - document A			7330
Total word count - document B			8727
Total word count - documents A + B			16057

...SPECIFICATION the optical disc drive apparatus, the address reading  
section 26 reproduces the sector identifier portion ID of the optical  
disc by a laser beam and reads out the address information and data  
field identification flag of the sector identifier portion ID and  
outputs the address signal 107 and data...

...SPECIFICATION the optical disc drive apparatus, the address reading  
section 26 reproduces the sector identifier portion ID of the optical  
disc by a laser beam and reads out the address information and data

field identification flag of the sector identifier portion ID and outputs the address signal 107 and data...

18/3,K/2 (Item 2 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 2005 European Patent Office. All rts. reserv.

00421888

Bar code symbol readers with edge enhancement.  
Streifenkodeleser mit Randdetektionsverbesserung.  
Lecteurs de codes a barres avec meilleure mise en contraste de contours.

PATENT ASSIGNEE:

SYMBOL TECHNOLOGIES, INC., (417663), 116 Wilbur Place, Bohemia New York 11716-3300, (US), (applicant designated states: DE;FR;GB;IT)

INVENTOR:

Metlitsky, Boris, 18 Millstream Lane, Stony Brook, New York 11790, (US)  
Barkan, Edward, 8 Lynn Street, South Setauket, New York 11720, (US)  
Swartz, Jerome, 19 Crane Neck Road, Setauket, New York 11733, (US)

LEGAL REPRESENTATIVE:

Wagner, Karl H. et al (12561); WAGNER & GEYER Patentanwalte  
Gewurzmuhlstrasse 5, D-80538 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 433593 A2 910626 (Basic)  
EP 433593 A3 911121  
EP 433593 B1 931215

APPLICATION (CC, No, Date): EP 90119615 901012;

PRIORITY (CC, No, Date): US 438022 891120

DESIGNATED STATES: DE; FR; GB; IT

INTERNATIONAL PATENT CLASS: G06K-007/10;

ABSTRACT WORD COUNT: 163

LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPBBF1	2836
CLAIMS B	(German)	EPBBF1	1525
CLAIMS B	(French)	EPBBF1	1841
SPEC B	(English)	EPBBF1	7652
Total word count - document A			0
Total word count - document B			13854
Total word count - documents A + B			13854

...SPECIFICATION general object of this invention to overcome the aforementioned drawbacks in the field of electro-optic readers, particularly laser scanners for reading bar code symbols.  
It is another object of this invention to enhance the modulation of an analog electrical...

18/3,K/3 (Item 3 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 2005 European Patent Office. All rts. reserv.

00245007  
Optical disc and disc drive apparatus for writing/reading data into/from the disc.

Optische Platte und Plattengerat zum Aufzeichnen oder Wiedergeben von Daten in oder von der Platte.

Disque optique et appareil a disques pour enregistrer ou reproduire des donnees sur le ou a partir du disque.

PATENT ASSIGNEE:

MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD., (216883), 1006, Oaza Kadoma,  
Kadoma-shi, Osaka-fu, 571, (JP), (applicant designated states:  
DE;FR;GB)

INVENTOR:

Satoh, Isao, 36-12, Naritahigashigaoka, Neyagawa-shi, (JP)  
Ichinose, Makoto, 4-3-303, Harayamadai-1-chome, Sakai-shi, (JP)  
Fukushima, Yoshihisa, 14-C-508, Sekime-6-chome, Joto-ku, (JP)  
Kuroki, Yuzuru, 14-6-410, Minowa-2-chome, Toyonaka-shi, (JP)  
Takagi, Yuji, 3-14, Miyukihihigashimachi, Neyagawa-shi, (JP)

LEGAL REPRESENTATIVE:

De Minvielle-Devaux, Ian Benedict Peter et al (30051), CARPMAELS &  
RANSFORD 43, Bloomsbury Square, London WC1A 2RA, (GB)

PATENT (CC, No, Kind, Date): EP 232134 A2 870812 (Basic)  
EP 232134 A3 881228  
EP 232134 B1 940824

APPLICATION (CC, No, Date): EP 87300789 870129;

PRIORITY (CC, No, Date): JP 8626374 860207; JP 8626376 860207; JP 8629256  
860213; JP 8638839 860224; JP 8646533 860304; JP 86113934 860519; JP  
86128669 860603

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: G11B-007/013; G11B-020/12; G11B-027/10;  
G11B-007/08; G11B-019/04;

ABSTRACT WORD COUNT: 230

LANGUAGE (Publication, Procedural, Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPBBF1	1504
CLAIMS B	(English)	EPBBF1	741
CLAIMS B	(German)	EPBBF1	700
CLAIMS B	(French)	EPBBF1	935
SPEC A	(English)	EPBBF1	6706
SPEC B	(English)	EPBBF1	6575
Total word count - document A			8210
Total word count - document B			8951
Total word count - documents A + B			17161

...SPECIFICATION the optical disc drive apparatus, the address reading section 26 reproduces the sector identifier portion ID of the optical disc by a laser beam and reads out the address information and data field identification flag of the sector identifier portion ID and outputs the address signal 107 and data...

...SPECIFICATION the optical disc drive apparatus, the address reading section 26 reproduces the sector identifier portion ID of the optical disc by a laser beam and reads out the address information and data field identification flag of the sector identifier portion ID and outputs the address signal 107 and data...

18/3,K/4 (Item 1 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
(c) 2005 WIPO/Univentio. All rts. reserv.

00347253  
DOPED DIAMOND LASER  
LASER A DIAMANT, DOPE  
Patent Applicant/Assignee:  
SI DIAMOND TECHNOLOGY INC,

Inventor(s):

JAMISON Keith D,  
SCHMIDT Howard K,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9629766 A1 19960926  
Application: WO 96US2540 19960226 (PCT/WO US9602540)  
Priority Application: US 95406306 19950317

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

CA JP KR RU AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE

Publication Language: English

Fulltext Word Count: 4219

Fulltext Availability:

[Detailed Description](#)

[Detailed Description](#)

... film during growth, one can produce a uniformly doped diamond film of arbitrary thickness.

A **number** of researchers have investigated **diamond** as a **laser** or **optical** amplifier medium using contaminants found in natural and high pressure synthetic diamonds, but uniformly metal...

?

20/3,K/1 (Item 1 from file: 348)  
DIALOG(R) File 348:EUROPEAN PATENTS  
(c) 2005 European Patent Office. All rts. reserv.

01694706

**Thermal transfer printing method**

**Thermisches Übertragungsdruckverfahren**

**Methode pour l'impression par transfert thermique**

**PATENT ASSIGNEE:**

EASTMAN KODAK COMPANY, (201212), 343 State Street, Rochester, New York  
14650, (US), (Applicant designated States: all)

**INVENTOR:**

Allen, Loretta E., Eastman Kodak Company, 343 State Street, Rochester,  
New York 14650-2201, (US)

Bryant, Robert C., Eastman Kodak Company, 343 State Street, Rochester,  
New York 14650-2201, (US)

Simpson, William H., Eastman Kodak Company, 343 State Street, Rochester,  
New York 14650-2201, (US)

Patton, David L., Eastman Kodak Company, 343 State Street, Rochester,  
New York 14650-2201, (US)

Frosig, Peter A., Eastman Kodak Company, 343 State Street, Rochester, New  
York 14650-2201, (US)

Johnson, David A., Eastman Kodak Company, 343 State Street, Rochester,  
New York 14650-2201, (US)

Goff, Cobb S., Eastman Kodak Company, 343 State Street, Rochester, New  
York 14650-2201, (US)

Coons, David E., Eastman Kodak Company, 343 State Street, Rochester, New  
York 14650-2201, (US)

**LEGAL REPRESENTATIVE:**

Weber, Etienne Nicolas et al (91684), Kodak Industrie, Departement  
Brevets, CRT, Zone Industrielle, 71102 Chalon sur Saone Cedex, (FR)

**PATENT (CC, No, Kind, Date):** EP 1388428 A1 040211 (Basic)

**APPLICATION (CC, No, Date):** EP 2003077635 030729;

**PRIORITY (CC, No, Date):** US 213991 020807; US 310519 021205

**DESIGNATED STATES:** DE; FR; GB

**EXTENDED DESIGNATED STATES:** AL; LT; LV; MK

**INTERNATIONAL PATENT CLASS:** B41M-005/38; B41M-007/00; G06K-007/14;  
G09F-003/02; G09F-003/10; B41J-002/325

**ABSTRACT WORD COUNT:** 53

**NOTE:**

Figure number on first page: 1

**LANGUAGE (Publication,Procedural,Application):** English; English; English  
**FULLTEXT AVAILABILITY:**

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200407	352
SPEC A	(English)	200407	5967
Total word count - document A			6319
Total word count - document B			0
Total word count - documents A + B			6319

**INVENTOR:**

... US)

Patton, David L ...

...SPECIFICATION for measuring/mapping the physical surface contour is done  
with a contact instrument using a **diamond** stylus with a light load  
(50mg). The **diamond** stylus tip has a 2.5-micron radius with a 90 degree  
included angle. Multiple...

20/3,K/2 (Item 2 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 2005 European Patent Office. All rts. reserv.

01594568

Method for making gemstones with a unique micro discrete indicia  
Verfahren zur Herstellung von Edelsteinen mit einem einzigartigen  
mikro-diskreten Zeichen  
Procede pour fabriquer des pierres precieuses avec une marque  
micro-discrete unique

PATENT ASSIGNEE:

EASTMAN KODAK COMPANY, (201212), 343 State Street, Rochester, New York  
14650, (US), (Applicant designated States: all)

INVENTOR:

Patton, David Lynn, Eastman Kodak Company , 343 State Street, Rochester,  
New York 14650-2201, (US)  
Spoonhower, John P., Eastman Kodak Company , 343 State Street,  
Rochester, New York 14650-2201, (US)

LEGAL REPRESENTATIVE:

Haile, Helen Cynthia et al (60522), Kodak Limited Patent, W92-3A,  
Headstone Drive, Harrow, Middlesex HA1 4TY, (GB)

PATENT (CC, No, Kind, Date): EP 1321305 A2 030625 (Basic)

APPLICATION (CC, No, Date): EP 2002080196 021209;

PRIORITY (CC, No, Date): US 27016 011221

DESIGNATED STATES: AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR;

IE; IT; LI; LU; MC; NL; PT; SE; SI; SK; TR

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO

INTERNATIONAL PATENT CLASS: B41M-005/24; B44C-001/22

ABSTRACT WORD COUNT: 15

NOTE:

Figure number on first page: 1

LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200326	217
SPEC A	(English)	200326	3590
Total word count - document A			3807
Total word count - document B			0
Total word count - documents A + B			3807

Method for making gemstones with a unique micro discrete indicia

INVENTOR:

Patton, David Lynn, Eastman Kodak Company ...

...US)

Spoonhower, John P., Eastman Kodak Company ...

...ABSTRACT A2

A method for providing and reading micro-discrete indicia on a  
gemstone using near-field optics.

...SPECIFICATION This invention relates a method and system for forming  
unique micro discrete indicia on a gemstone such as a diamond using  
near-field optical imaging.

Recent advances in optics provide for a method of exposure...

...than those produced by conventional optical systems and still be  
readable.

Optical means to mark **diamonds** and other **gemstones** have been previously described. Kaplan et al. in US Patent No. 6,211,484 B1 describe the use of a pulsed laser system and precision mechanical positioning controls to mark **gemstones** and a process to produce a secure certificate of authenticity. The laser in this instance...

...a micron. The laser exposure produces a series of ablated or graphitic spots on the **gemstone** surface.

Smith et al. in US Patent No. 6,187,213 B1 describe the use of an ultraviolet (UV) laser system for marking **diamond**. The use of the 193 nanometers exposure with conventional optical elements produces a mark that...

20/3,K/3 (Item 3 from file: 348)  
DIALOG(R) File 348:EUROPEAN PATENTS  
(c) 2005 European Patent Office. All rts. reserv.

01437573

Reducing noise in a technique for diagnosing attention deficit hyperactivity disorder  
Rauschverminderung in der Technik der Diagnose fur Aufmerksamkeitsmangelstorung  
Reduction du bruit dans une technique pour diagnostiquer des troubles deficitaires de l'attention

PATENT ASSIGNEE:

EASTMAN KODAK COMPANY, (201212), 343 State Street, Rochester, New York 14650, (US), (Applicant designated States: all)

INVENTOR:

Blazey, Richard N., Eastman Kodak Company, 343 State Street, Rochester, New York 14650-2201, (US)

Patton, David L., Eastman Kodak Company, 343 State Street, Rochester, New York 14650-2201, (US)

Parks, Peter A., Eastman Kodak Company, 343 State Street, Rochester, New York 14650-2201, (US)

LEGAL REPRESENTATIVE:

Gervasi, Gemma, Dr. (40516), Notarbartolo & Gervasi GmbH, Bavariaring 21, 80336 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 1221306 A2 020710 (Basic)  
EP 1221306 A3 031119

APPLICATION (CC, No, Date): EP 2001204771 011210;

PRIORITY (CC, No, Date): US 746052 001221

DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE; TR

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS: A61B-005/16; G06F-019/00

ABSTRACT WORD COUNT: 115

NOTE:

Figure number on first page: 4A

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200228	143
SPEC A	(English)	200228	3824
Total word count - document A			3967
Total word count - document B			0
Total word count - documents A + B			3967

INVENTOR:

... US)

Patton, David L ...

...SPECIFICATION been added to actual Mrange data for a subject. Fig. 10 shows the original signal ( diamonds ), the signal with the modulation added (triangles) and the signal that would be extracted (X...).

20/3,K/4 (Item 4 from file: 348)

DIALOG(R) File 348:EUROPEAN PATENTS

(c) 2005 European Patent Office. All rts. reserv.

01436818

Using image modification and temperature biofeedback to diagnose and treat

Attention Deficit Hyperactivity Disorder (ADHD)  
Diagnose und Behandlung von Hyperaktivitat mit Aufmerksamkeitsstorungen  
mittels Bildveranderung und Temperaturruckkopplung  
Diagnostic et traitement du trouble deficitaire de l'attention avec  
hyperactivite a l'aide de modification d'images et de bioretroaction en  
temperature

PATENT ASSIGNEE:

EASTMAN KODAK COMPANY, (201212), 343 State Street, Rochester, New York  
14650, (US), (Applicant designated States: all)

INVENTOR:

Patton, David L. , Eastman Kodak Company, PLS, 343 State Street,  
Rochester, New York 14650-2201, (US)  
Blazey, Richard N., Eastman Kodak Company, PLS, 343 State Street,  
Rochester, New York 14650-2201, (US)  
Parks, Peter A., Eastman Kodak Company, PLS, 343 State Street, Rochester,  
New York 14650-2201, (US)

LEGAL REPRESENTATIVE:

Gervasi, Gemma, Dr. (40516), Notarbartolo & Gervasi GmbH, Bavariaring 21,  
80336 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 1219233 A2 020703 (Basic)  
EP 1219233 A3 021211

APPLICATION (CC, No, Date): EP 2001204822 011210;

PRIORITY (CC, No, Date): US 747216 001221

DESIGNATED STATES: CH; DE; FR; GB; IT; LI; SE

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS: A61B-005/00; A61B-005/16

ABSTRACT WORD COUNT: 73

NOTE:

Figure number on first page: 2

LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200227	576
SPEC A	(English)	200227	3835
Total word count - document A			4411
Total word count - document B			0
Total word count - documents A + B			4411

INVENTOR:

Patton, David L ...

...SPECIFICATION been added to actual Mrange data for a subject. Fig. 10  
shows the original signal ( diamonds ), the signal with the modulation  
added (triangles) and the signal that would be extracted (X...  
?

24/3,K/1 (Item 1 from file: 348)  
DIALOG(R) File 348:EUROPEAN PATENTS  
(c) 2005 European Patent Office. All rts. reserv.

01275667

An automated gemstone evaluation system  
Automatisches System zur Schatzung des Wertes eines Edelsteins  
Système automatique pour evaluer les pierres gemmes

PATENT ASSIGNEE:

Malnekoff, Peter J., (2877920), 5 South Wabash, Suite 1010, Chicago,  
Illinois 60603, (US), (Applicant designated States: all)

INVENTOR:

Malnekoff, Peter J., 5 South Wabash, Suite 1010, Chicago, Illinois 60603,  
(US)

LEGAL REPRESENTATIVE:

Molyneaux, Martyn William (34011), Langner Parry 52-54 High Holborn,  
London WC1V 6RR, (GB)

PATENT (CC, No, Kind, Date): EP 1096410 A1 010502 (Basic)

APPLICATION (CC, No, Date): EP 99308402 991025;

DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI;  
LU; MC; NL; PT; SE

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS: G06F-017/60

ABSTRACT WORD COUNT: 117

NOTE:

Figure number on first page: 2

LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200118	730
SPEC A	(English)	200118	2857
Total word count - document A			3587
Total word count - document B			0
Total word count - documents A + B			3587

...SPECIFICATION to be able to make an adjustment based on the particular  
lab generating the laboratory **certificate** for the **gemstone** .

The automated gemstone evaluation system 10, when determining an  
adjustment factor 114, preferably takes into...

24/3,K/2 (Item 2 from file: 348)

DIALOG(R) File 348:EUROPEAN PATENTS  
(c) 2005 European Patent Office. All rts. reserv.

00992179

Process and device for marking gems and product obtained  
Verfahren und Vorrichtung zum Markieren von Edelsteinen sowie dadurch  
erhaltene Erzeugnisse

Procede et dispositif pour marquer des pierres precieuses et produit ainsi  
obtenu

PATENT ASSIGNEE:

Gemmindustria Gaia Ferrando S.p.A., (2475390), Via Larga, 31, 20122  
Milano, (IT), (applicant designated states:  
AT;BE;CH;DE;DK;ES;FI;FR;GB;GR;IE;IT;LI;LU;MC;NL;PT;SE)

INVENTOR:

Gaia, Mario, Via Plutone, 7, 20060 Cassina De' Pecchi, Milano, (IT)

LEGAL REPRESENTATIVE:

Petruzziello, Aldo et al (59343), Racheli & C. S p A Viale San Michele

del Carso, 4, 20144 Milano, (IT)  
PATENT (CC, No, Kind, Date): EP 897021 A1 990217 (Basic)  
APPLICATION (CC, No, Date): EP 98104223 980310;  
PRIORITY (CC, No, Date): IT 97MI1888 970805  
DESIGNATED STATES: AT; CH; DE; ES; FR; GB; LI  
INTERNATIONAL PATENT CLASS: C23C-014/04; A44C-017/00; C30B-033/00;  
ABSTRACT WORD COUNT: 83

LANGUAGE (Publication,Procedural,Application): English; English; Italian  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	9907	562
SPEC A	(English)	9907	1425
Total word count - document A			1987
Total word count - document B			0
Total word count - documents A + B			1987

...SPECIFICATION the field of jewelry and gemmology there has long been a need to provide a **certification** for individual **gems** that is able to establish a reciprocal unique match between a certain gem and the relative **certificate**. At present **gems** are supplied with a certificate of guarantee which has no counterpart, however, on the particular...

24/3,K/3 (Item 3 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 2005 European Patent Office. All rts. reserv.

00872069

LASER MARKING SYSTEM FOR GEMSTONES AND METHOD OF AUTHENTICATING MARKING  
LASERMARKIERUNGSSYSTEM FUR EDELSTEINE UND VERFAHREN ZUR AUTHENTIFIZIERUNG  
VON MARKIERUNGEN  
SYSTEME DE MARQUAGE DE PIERRES PRECIEUSES PAR LASER ET PROCEDE  
D'AUTHENTIFICATION DE MARQUES

PATENT ASSIGNEE:

LAZARE KAPLAN INTERNATIONAL INC., (1699920), 529 Fifth Avenue, New York,  
NY 10017, (US), (Applicant designated States: all)

INVENTOR:

KAPLAN, George, R., 4 Robbins Roost, Rye Brook, NY 10573, (US)  
SHACHRAI, Avigdor, 6 Hadas Street, Ramat Poleg, 48091 Netanya, (IL)  
ANNER, Oded, 9/5 Nahlieli Street, Ganei Hasharon, 44026 Kfar-Saba, (IL)  
GURVICH, Leonid, 3/18 Sharira, 75381 Rishon Lezion, (IL)

LEGAL REPRESENTATIVE:

Gornott, Dietmar, Dipl.-Ing. (46483), Zilleweg 29, 64291 Darmstadt, (DE)  
PATENT (CC, No, Kind, Date): EP 1021271 A1 000726 (Basic)

WO 9725177 970717

APPLICATION (CC, No, Date): EP 96940506 961114; WO 96US18448 961114

PRIORITY (CC, No, Date): US 9638 960105; US 690309 960730

DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU;  
MC; NL; PT; SE

INTERNATIONAL PATENT CLASS: B23K-026/04; G06K-001/02

NOTE:

No A-document published by EPO

LANGUAGE (Publication,Procedural,Application): English; English; English

LASER MARKING SYSTEM FOR GEMSTONES AND METHOD OF AUTHENTICATING MARKING

24/3,K/4 (Item 4 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

(c) 2005 European Patent Office. All rts. reserv.

00572257

**Method and apparatus of synthesizing diamond in vapor phase**  
**Verfahren und Vorrichtung zur Synthese von Diamanten aus der Dampfphase**  
**Procede et dispositif pour synthetiser le diamant en phase vapeur**

PATENT ASSIGNEE:

Sumitomo Electric Industries, Ltd., (279011), 5-33, Kitahama 4-chome,  
Chuo-ku, Osaka 541, (JP), (applicant designated states: DE;FR;GB)

INVENTOR:

Ikegaya, Akihiko, c/o Itami Works of, Sumitomo Elec. Ind. Ltd., 1-1,  
Koyakita 1-chome, Itami-shi, Hyogo, (JP)  
Fujimori, Naoji, c/o Itami Works of, Sumitomo Elec. Ind. Ltd., 1-1,  
Koyakita 1-chome, Itami-shi, Hyogo, (JP)

LEGAL REPRESENTATIVE:

Smith, Norman Ian et al (36041), F.J. CLEVELAND & COMPANY 40-43 Chancery  
Lane, London WC2A 1JQ, (GB)

PATENT (CC, No, Kind, Date): EP 564156 A1 931006 (Basic)  
EP 564156 B1 960703

APPLICATION (CC, No, Date): EP 93302263 930325;

PRIORITY (CC, No, Date): JP 92106016 920330

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: C23C-016/26; C23C-016/50; H05H-001/44;

ABSTRACT WORD COUNT: 221

LANGUAGE (Publication, Procedural, Application): English; English; English  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF1	2547
CLAIMS B	(English)	EPAB96	2004
CLAIMS B	(German)	EPAB96	1835
CLAIMS B	(French)	EPAB96	2323
SPEC A	(English)	EPABF1	13138
SPEC B	(English)	EPAB96	13592
Total word count - document A			15686
Total word count - document B			19754
Total word count - documents A + B			35440

...SPECIFICATION of 5 inches. The diamond is superior in the uniformity of thickness. Raman scattering spectroscopy **certifies** that the **diamond** contains little impurities; non-diamond carbon ingredients. Embodiment 2 allows us to fabricate a wide...

...SPECIFICATION mm (5 inches). The diamond is superior in the uniformity of thickness. Raman scattering spectroscopy **certifies** that the **diamond** contains little impurities; non-diamond carbon ingredients. Embodiment 2 allows us to fabricate a wide...

24/3,K/5 (Item 5 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

(c) 2005 European Patent Office. All rts. reserv.

00541879

**Method and apparatus for synthesizing diamond in vapor phase.**  
**Verfahren und Vorrichtung zur Synthese von Diamanten aus der Dampfphase.**  
**Procede et dispositif pour synthetiser le diamant en phase vapeur.**

PATENT ASSIGNEE:

SUMITOMO ELECTRIC INDUSTRIES, LIMITED, (279014), 5-33, Kitahama 4-chome  
Chuo-ku, Osaka 541, (JP), (applicant designated states: DE;FR;GB)

INVENTOR:

Ikegawa, Akihiko, Itami Works of Sumitomo, Electr. Ind. Ltd., 1-1  
Koyakita 1-chome, Itami-shi, Hyogo, (JP)  
Fujimori, Naoji, Itami Works of Sumitomo, Electr. Ind. Ltd., 1-1  
Koyakita 1-chome, Itami-shi, Hyogo, (JP)  
Yoshikawa, Masanori, 3-25-16, Maruyamadai, Konan-ku, Yokohama-shi,  
Kanagawa-ken, (JP)

LEGAL REPRESENTATIVE:

Smith, Norman Ian et al (36041), F.J. CLEVELAND & COMPANY 40-43 Chancery  
Lane, London WC2A 1JQ, (GB)

PATENT (CC, No, Kind, Date): EP 522842 A1 930113 (Basic)  
EP 522842 B1 950920

APPLICATION (CC, No, Date): EP 92306274 920708;

PRIORITY (CC, No, Date): JP 91197109 910710; JP 91225100 910809

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: C30B-029/04; C30B-025/00; C23C-016/26;

ABSTRACT WORD COUNT: 174

LANGUAGE (Publication, Procedural, Application): English; English; English  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS	B (English)	EPAB95	1544
CLAIMS	B (German)	EPAB95	1402
CLAIMS	B (French)	EPAB95	1760
SPEC	B (English)	EPAB95	11926
Total word count - document	A		0
Total word count - document	B		16632
Total word count - documents	A + B		16632

...SPECIFICATION mm (5 inches). The diamond is superior in the uniformity  
of thickness. Raman scattering spectroscopy **certifies** that the **diamond**  
contains little impurities ; non-diamond carbon ingredients. Embodiment  
2 allows

24/3,K/6 (Item 6 from file: 348)

DIALOG(R) File 348:EUROPEAN PATENTS

(c) 2005 European Patent Office. All rts. reserv.

00420292

**Diamond synthesizing apparatus.**

**Vorrichtung zur Synthese von Diamanten.**

**Appareil de synthese de diamant.**

PATENT ASSIGNEE:

SUMITOMO ELECTRIC INDUSTRIES, LTD., (279013), 5-33, Kitahama 4-chome,  
Chuo-ku, Osaka-shi, Osaka 541, (JP), (applicant designated states:  
DE;FR;GB;NL)

INVENTOR:

Ota, Nobuhiro, c/o Itami Works of Sumitomo Elec., Industries, Ltd., 1-1,  
Koyakita 1-chome, Itami-shi, Hyogo, (JP)  
Fujimori, Naoji, c/o Itami Works of Sumitomo Elec., Industries, Ltd.,  
1-1, Koyakita 1-chome, Itami-shi, Hyogo, (JP)

LEGAL REPRESENTATIVE:

Herrmann-Trentepohl, Werner, Dipl.-Ing. et al (5373), Patentanwalte  
Herrmann-Trentepohl, Kirschner, Grosse, Bockhorni & Partner  
Forstenrieder Allee 59, D-81476 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 418837 A1 910327 (Basic)  
EP 418837 B1 931201

APPLICATION (CC, No, Date): EP 90117965 900918;

PRIORITY (CC, No, Date): JP 89245748 890920; JP 90231650 900831

DESIGNATED STATES: DE; FR; GB; NL

INTERNATIONAL PATENT CLASS: C01B-031/06; C30B-029/04;  
ABSTRACT WORD COUNT: 182

LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPBBF1	758
CLAIMS B	(German)	EPBBF1	737
CLAIMS B	(French)	EPBBF1	957
SPEC B	(English)	EPBBF1	3745
Total word count - document A			0
Total word count - document B			6197
Total word count - documents A + B			6197

...SPECIFICATION cost.

Description of the Background Art

A technique for vapor-phase synthesizing diamond was started by Derjaguin (USSR Inv. Certif. No. 339134, 1958) in 1956 and by Eversole (USP Nos. 3030187 and 3030188) in 1958...

24/3,K/7 (Item 7 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 2005 European Patent Office. All rts. reserv.

00391004

A diamond for a dresser

Diamant fur Abrichtungsvorrichtung

Diamant pour dispositif a dresser

PATENT ASSIGNEE:

SUMITOMO ELECTRIC INDUSTRIES, LTD., (279013), 5-33, Kitahama 4-chome, Chuo-ku, Osaka-shi, Osaka 541, (JP), (applicant designated states: DE;FR;GB;NL)

INVENTOR:

Satoh, Shuichi, c/o Itami Works, Sumitomo Electric Ind. Ltd., 1-1, Koyakita 1-chome, Itami-shi, Hyogo, (JP)  
Tsugi, Kazuwo, c/o Itami Works, Sumitomo Electric Ind. Ltd., 1-1, Koyakita 1-chome, Itami-shi, Hyogo, (JP)  
Yoshida, Akito, c/o Itami Works, Sumitomo Electric Ind. Ltd., 1-1, Koyakita 1-chome, Itami-shi, Hyogo, (JP)  
Urakawa, Nobuo, c/o Itami Works, Sumitomo Electric Ind. Ltd., 1-1, Koyakita 1-chome, Itami-shi, Hyogo, (JP)

LEGAL REPRESENTATIVE:

Hansen, Bernd, Dr. Dipl.-Chem. et al (4921), Hoffmann Eitle, Patent- und Rechtsanwalte, Postfach 81 04 20, 81904 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 391418 A1 901010 (Basic)  
EP 391418 B1 950125

APPLICATION (CC, No, Date): EP 90106545 900405;

PRIORITY (CC, No, Date): JP 8988517 890406; JP 89277393 891025

DESIGNATED STATES: DE; FR; GB; NL

INTERNATIONAL PATENT CLASS: C30B-033/00

ABSTRACT WORD COUNT: 176

LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	9837	49
CLAIMS B	(German)	9837	54
CLAIMS B	(French)	9837	50
SPEC B	(English)	9837	4718
Total word count - document A			0

Total word count - document B 4871  
Total word count - documents A + B 4871

...SPECIFICATION small to handle and the quality is not sufficient for use  
as a wire drawing **die**.

These processes **certify** the linearity of the groove within 0.1 mm and  
the discrepancy of an angle...

**24/3,K/8 (Item 8 from file: 349)**  
DIALOG(R) File 349:PCT FULLTEXT  
(c) 2005 WIPO/Univentio. All rts. reserv.

00828044 \*\*Image available\*\*  
**METHOD AND SYSTEM FOR INTERNATIONAL E-COMMERCE**  
**PROCEDE ET SYSTEME DESTINES AU COMMERCE ELECTRONIQUE INTERNATIONAL**  
Patent Applicant/Assignee:  
E-GLOBAL NETWORK INC, 1990 N. California Boulevard, Suite 830, Walnut  
Creek, CA 94596, US, US (Residence), US (Nationality)  
Inventor(s):  
INGRAM Bradley Kent, 3336 Green Meadow Drive, Danville, CA 94506, US,  
RICARIO Jerry M, 7968 Tinaja Lane, San Diego, CA 92139, US,  
Legal Representative:  
ROGITZ John L (agent), Rogitz & Associates, 750 B Street, Suite 3120, San  
Diego, CA 92101, US,  
Patent and Priority Information (Country, Number, Date):  
Patent: WO 200161586 A1 20010823 (WO 0161586)  
Application: WO 2000US35676 20001228 (PCT/WO US0035676)  
Priority Application: US 2000507183 20000218  
Designated States:  
(Protection type is "patent" unless otherwise stated - for applications  
prior to 2004)  
AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB  
GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA  
MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA  
UG UZ VN YU ZA ZW  
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR  
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM  
Publication Language: English  
Filing Language: English  
Fulltext Word Count: 5480

Fulltext Availability:  
Detailed Description

Detailed Description  
... authenticated, "fail" can be returned at state 66; otherwise, the user  
is authenticated.

For users **authenticated** at decision **diamond 64**, the logic flows to  
block 68 to receive shipping information from the user. This...

**24/3,K/9 (Item 9 from file: 349)**  
DIALOG(R) File 349:PCT FULLTEXT  
(c) 2005 WIPO/Univentio. All rts. reserv.

00785490 \*\*Image available\*\*  
**INTERNET PROTOCOL MOBILITY ARCHITECTURE FRAMEWORK**

**CADRE D'ARCHITECTURE DE MOBILITE PAR PROTOCOLE INTERNET**

**Patent Applicant/Assignee:**

NORTEL NETWORKS LIMITED, World Trade Center of Montreal, 8th floor, 380  
St. Antoine Street West, Montreal, Quebec H2Y 3Y4, CA, CA (Residence),  
CA (Nationality)

**Inventor(s):**

AKHTAR Haseeb, 3102 Pamela Place, Garland, TX 75044, US,  
QADDOURA Emad A, 1320 Wateredge Drive, Plano, TX 75093, US,  
BECKER Carey B, 1529 Faringdon Drive, Plano, TX 75075, US,  
PATIL Basavaraj B, 7616 Capella Court, Plano, TX 75025, US,  
BARNES March H, 3820 Hidden Trail, Flower Mound, TX 75028, US,  
WURCH Donald L, 3607 Highpoint Drive, Rockwall, TX 75078, US,  
COFFIN Russell C, 5608 Crowndale Drive, Plano, TX 75093-8500, US,  
ZHU Zemin, 3808 Neiman Road, Plano, TX 75025, US,  
TUMMALA Rambabu, 4324 Giovanni, Plano, TX 75024, US,  
NARAYANAN Raja, 1100 Meredith Lane #728, Plano, TX 75093, US,  
KHALIL Mohamed, 118 Briaroaks Street, Murphy, TX 75095, US,  
LE Liem Q, 1605 Meadowgate Drive, Richardson, TX 75081, US,

**Patent and Priority Information (Country, Number, Date):**

Patent: WO 200119050 A2-A3 20010315 (WO 0119050)  
Application: WO 2000IB1553 20000908 (PCT/WO IB0001553)  
Priority Application: US 99152916 19990908; US 99156669 19990929; US  
99157289 19991001; US 99157449 19991004; US 2000192411 20000327; US  
2000657516 20000907

**Designated States:**

(Protection type is "patent" unless otherwise stated - for applications  
prior to 2004)

AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD GE  
GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK  
MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU  
ZA ZW  
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE  
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 85222

**Fulltext Availability:**

Claims

**Claim**

... a) an interface connectable to a visited NSF having a  
visited UDS configured for using **Diamond Authentication**,  
Authorization, and Accounting (AAA) protocol to transmit  
to the server of the home UDS a...

**24/3,K/10 (Item 10 from file: 349)**  
DIALOG(R) File 349:PCT FULLTEXT  
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00776516 \*\*Image available\*\*

**PARSING A PACKET HEADER**

**ANALYSE D'UN EN-TETE DE PAQUET**

**Patent Applicant/Assignee:**

INTEL CORPORATION, 2200 Mission College Boulevard, Santa Clara, CA 95052,  
US, US (Residence), US (Nationality), (For all designated states  
except: US)

**Patent Applicant/Inventor:**

ELZUR Uri, Hashomer Street 78, 30900 Zichron Yaakov, IL, IL (Residence), IL (Nationality), (Designated only for: US)

Legal Representative:

TROP Timothy N (agent), Trop, Pruner, Hu & Miles, P.C., Suite 100, 8554 Katy Freeway, Houston, TX 77024, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200110096 A2-A3 20010208 (WO 0110096)

Application: WO 2000US16762 20000616 (PCT/WO US0016762)

Priority Application: US 99364096 19990730

Parent Application/Grant:

Related by Continuation to: US 99364096 19990730 (CON)

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 7693

Fulltext Availability:

Detailed Description

Detailed Description

... receive parser 98 may determine if the packet needs authentication or decryption, as indicated in **diamond** 201.

If **authentication** or encryption is needed, then the receive parser 98 may use the parsed information from...

**24/3, K/11 (Item 11 from file: 349)**  
DIALOG(R) File 349:PCT FULLTEXT  
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00733700 \*\*Image available\*\*

**E-COMMERCE DEMAND AGGREGATION**

**REGROUPEMENT DES DEMANDES DE COMMERCE ELECTRONIQUE**

Patent Applicant/Assignee:

DEALTIME COM LTD, Hazoran Street 6, 42504 Netanya South Industrial Zone, IL, IL (Residence), IL (Nationality)

DEALTIME COM LTD, 475 Fifth Avenue, New York, NY 10017, US, US (Residence), US (Nationality)

Inventor(s):

SHARFMAN Nahum, Hameyasdim Street 22, 37064 Karkur, IL

ASHKENAZI Amir, 1 Kinds Park, Rye Brook, NY 10573, US

Legal Representative:

JOHNSON John M, Kaye, Scholer, Fierman, Hays & Handler, LLP, 425 Park Avenue, New York, NY 10022-3598, US

Patent and Priority Information (Country, Number, Date):

Patent: WO 200046687 A1 20000810 (WO 0046687)

Application: WO 2000US2830 20000203 (PCT/WO US0002830)

Priority Application: US 99118684 19990205; US 99390015 19990903

Designated States:

(Protection type is "patent" unless otherwise stated - for applications

prior to 2004)

AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB  
GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA  
MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA  
UG UZ VN YU ZA ZW  
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE  
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW SD SL SZ TZ UG ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 17470

Fulltext Availability:

Detailed Description

Detailed Description

... customers 20, as depicted by the arrow labeled "NO" returning to box 105 from decision diamond 107. Once the certified merchant 30 decides to make an offer of the product, good or service, the offer...

**24/3, K/12 (Item 12 from file: 349)**

DIALOG(R) File 349:PCT FULLTEXT

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00733699 \*\*Image available\*\*

**E-COMMERCE NOTIFICATION**

**NOTIFICATION DE COMMERCE ELECTRONIQUE**

Patent Applicant/Assignee:

DEALTIME COM LTD, 6 Hazoran Street, Netanya South Industrial Zone, Israel  
42504, IL, IL (Residence), IL (Nationality)  
DEALTIME COM LTD, 475 Fifth Avenue, New York, NY 10017, US, US  
(Residence), -- (Nationality)

Inventor(s):

SHARFMAN Nahum, 22 Hameyasdim Street, 37064 Karkur, IL,  
ASHKENAZI Amir, 1 Kinds Park, Rye Brook, NY 10573, US,

Legal Representative:

JOHNSON John M (agent), Kaye, Scholer, Fierman, Hays & Handler, LLP, 425  
Park Avenue, New York, NY 10022-3598, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200046686 A1 20000810 (WO 0046686)  
Application: WO 2000US2829 20000203 (PCT/WO US0002829)  
Priority Application: US 99118684 19990205; US 99389969 19990903

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB  
GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA  
MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA  
UG UZ VN YU ZA ZW  
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE  
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW SD SL SZ TZ UG ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 13523

Fulltext Availability:

Detailed Description

Detailed Description

... customers 20, as depicted by the arrow labeled "NO" returning to box 105 from decision diamond 107. Once the certified0 merchant 30 decides to make an offer of the product, good or service, the offer...

24/3,K/13 (Item 13 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00530538 \*\*Image available\*\*

**METHOD AND ASSOCIATED APPARATUS FOR THE STANDARDIZED GRADING OF GEMSTONES  
PROCEDE ET DISPOSITIF PERMETTANT LE CLASSEMENT NORMALISE DES PIERRES  
PRECIEUSES**

Patent Applicant/Assignee:

AGGARWAL Lalit K,

Inventor(s):

AGGARWAL Lalit K,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9961890 A1 19991202

Application: WO 99US11500 19990525 (PCT/WO US9911500)

Priority Application: US 9885797 19980528

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

BR CA IL IN JP US ZA AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT  
SE

Publication Language: English

Fulltext Word Count: 11550

Fulltext Availability:

Detailed Description

Detailed Description

... are utilized to identify it. The system is designed to evaluate multiple properties of a **gemstone** for **authentication**.

Calculated weight from the apparatus can be compared to scale weight and refractive index of...

24/3,K/14 (Item 14 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00388616 \*\*Image available\*\*

**OPTICAL TESTING SYSTEM FOR DISTINGUISHING A SILICON CARBIDE GEMSTONE FROM A DIAMOND**

**SYSTEME OPTIQUE D'ESSAI DESTINE A DISTINGUER UNE PIERRE PRECIEUSE EN CARBURE DE SILICIUM D'UN DIAMANT**

Patent Applicant/Assignee:

C3 INC,

HUNTER Charles Eric,

WALTZ Douglas G,

Inventor(s):

HUNTER Charles Eric,

WALTZ Douglas G,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9729359 A1 19970814

Application: WO 97US2244 19970212 (PCT/WO US9702244)  
Priority Application: US 96598564 19960212; US 97795228 19970210  
Designated States:  
(Protection type is "patent" unless otherwise stated - for applications prior to 2004)  
AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE HU IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK TJ TM TR TT UA UG US UZ VN YU KE LS MW SD SZ UG AM AZ BY KG KZ MD RU TJ TM AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG  
Publication Language: English  
Fulltext Word Count: 10218

Fulltext Availability:

Detailed Description

Detailed Description

... industry still do not produce reliable results in distinguishing between the two materials. In fact.. **certified gemstone** appraisers are known to have mistakenly identified silicon 3 carbide as diamond. The differences that...

24/3,K/15 (Item 15 from file: 349)  
DIALOG(R) File 349:PCT FULLTEXT  
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00376860 \*\*Image available\*\*  
**GEMSTONE REGISTRATION SYSTEM**  
**SYSTEME D'ENREGISTREMENT DE PIERRES PRECIEUSES**

Patent Applicant/Assignee:  
OMPHALOS RECOVERY SYSTEMS INC,

Inventor(s):

VANIER Dana J,  
WALLNER Hermann F,  
LEYDON Michael,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9717603 A1 19970515  
Application: WO 96CA731 19961107 (PCT/WO CA9600731)  
Priority Application: CA 2162532 19951109

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AL AM AT AU AZ BB BG BR BY CH CN CZ DE DK EE ES FI GB GE HU IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK TJ TM TR TT UA UG UZ VN KE LS MW SD SZ UG AM AZ BY KG KZ MD RU TJ TM AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG

Publication Language: English

Fulltext Word Count: 5774

Fulltext Availability:

Detailed Description

Detailed Description

... software and a counter. Associated with the personal computer is the printer 48 which prints **gemstone certificates** 50. In addition, the personal computer includes a modem 52 which communicates to a database...

24/3,K/16 (Item 16 from file: 349)  
DIALOG(R) File 349:PCT FULLTEXT  
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00368578 \*\*Image available\*\*  
SECURE INTERLINK RECEIVER FOR REMOTE PROGRAMMING OF WIRELESS TELEPHONES  
RECEPTEUR SUR D'INTERCONNEXION POUR LA PROGRAMMATION A DISTANCE DE  
TELEPHONES SANS FIL

Patent Applicant/Assignee:

McGREGOR Donald Scott,  
McGREGOR Travis Melchin,

Inventor(s):

McGREGOR Donald Scott,  
McGREGOR Travis Melchin,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9708905 A1 19970306

Application: WO 96US13999 19960829 (PCT/WO US9613999)

Priority Application: US 95521966 19950831

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AL AM AT AU AZ BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE HU IS JP  
KE KG KP KR KZ LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD  
SE SG SI SK TJ TM TR TT UA UG UZ VN KE LS MW SD SZ UG AM AZ BY KG KZ MD  
RU TJ TM AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG  
CI CM GA GN ML MR NE SN TD TG

Publication Language: English

Fulltext Word Count: 5547

Fulltext Availability:

Detailed Description

Detailed Description

... the interlink

receiver unit 14 and the phone data from the phone unit 18  
in **diamond** 77, The access **authentication** sub-routine is  
discussed with relation to Fig. 2C hereinafter,  
If the phone unit 12...

?

26/3,K/1 (Item 1 from file: 349)

DIALOG(R) File 349:PCT FULLTEXT

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00953763 \*\*Image available\*\*

MEDICAL LASER FIBER OPTIC CABLE HAVING IMPROVED TREATMENT INDICATORS FOR  
BPH SURGERY

CABLE A FIBRES OPTIQUES LASER MEDICAL AYANT DES INDICATEURS DE TRAITEMENT  
AMELIORES EN TERMES DE CHIRURGIE BPH

Patent Applicant/Assignee:

ETHICON ENDO-SURGERY INC, 4545 Creek Road, Cincinnati, OH 45242, US, US  
(Residence), US (Nationality)

Inventor(s):

BARTON Scott, 776 Quailwoods Drive, Cincinnati, OH 45140, US,  
JANOFF Karen, 7487 Great Water Lane, West Chester, OH 45069, US,  
BAKOS Gregory, 6330 Redwood Court, Mason, OH 45140, US,

Legal Representative:

JOHNSON Philip S (et al) (agent), Johnson & Johnson, One Johnson &  
Johnson Plaza, New Brunswick, NJ 08933, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200287457 A1 20021107 (WO 0287457)

Application: WO 2002US7682 20020315 (PCT/WO US0207682)

Priority Application: US 2001843203 20010426

Designated States:

(Protection type is "patent" unless otherwise stated - for applications  
prior to 2004)

AU CA JP

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

Publication Language: English

Filing Language: English

Fulltext Word Count: 5358

Fulltext Availability:

Detailed Description

Detailed Description

... formed in series along a single puncture site.

The markings are printed directly onto the **optical** fiber 28, so the  
spacing is well controlled. The area between the second primary mark...  
primary mark 102 to the third primary mark 103 is preferably about 10 mm.  
The **diamonds**, **designated** series of **marks** 108, 109, 111, 1129 113t  
1149 115, and 116, provide a visual cue that the **optical** fiber 28 is  
deep.

Series of marks 108, 109, 1119 1129 1139 1149 115, and...

26/3,K/2 (Item 2 from file: 349)

DIALOG(R) File 349:PCT FULLTEXT

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00755459 \*\*Image available\*\*

IDENTIFICATION DEVICE

DISPOSITIF D'IDENTIFICATION

Patent Applicant/Assignee:

T I D (IDENTIFYING DIAMOND) LIMITED, c/o Phoebe Christodoulou Law Office,  
Vylonos Avenue, P. Lordos Center, 1st floor, Office 105, 3036 Limassol,  
CY, CY (Residence), CY (Nationality), (For all designated states  
except: US)

Patent Applicant/Inventor:

REGEV Eyal, 63 Hahoresh Street, 46910 Kfar Shmaryahu, IL, IL (Residence),  
IL (Nationality), (Designated only for: US)

Legal Representative:

COLB Sanford T, Sanford, T. Colb & Co., P.O. Box 2273, 76122 Rehovot, IL  
Patent and Priority Information (Country, Number, Date):

Patent: WO 200068870 A1 20001116 (WO 0068870)

Application: WO 2000IL253 20000503 (PCT/WO IL0000253)

Priority Application: US 99304853 19990505; US 99407977 19990929

Designated States:

(Protection type is "patent" unless otherwise stated - for applications  
prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM DZ EE ES  
FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU  
LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT  
TZ UA UG US UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 3837

Fulltext Availability:

Claims

Claim

... 9 The jewelry piece (10) according to claim 8 wherein said  
identification data (22) are **optically** detectable.

-(01) I@jjamofoqj

jo lainjoignurtu P jo ss3lppu pup '(0 1) 30oid kijaAm) f...

...search terms used)

USPAT, DERWENT, EPO, JPO

search terms: gem, gemstone, jewelry, jewel, precious stone, diamond,  
ring, **id**, identification, embed, recess, insert, **inscribe**,  
engrave, **etch**

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category\* Citation of document, with indication, where appropriate, of...

26/3,K/3 (Item 3 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00564265 \*\*Image available\*\*

SYSTEM AND METHOD FOR REGISTER MARK RECOGNITION

SYSTEME ET PROCEDE DE RECONNAISSANCE DE MARQUES DE REPERE

Patent Applicant/Assignee:

CC1 INC,  
LEWIS Clarence A Jr,  
LEWIS Richard Dale,  
LEWIS James Edward,

Inventor(s):

LEWIS Clarence A Jr,  
LEWIS Richard Dale,  
LEWIS James Edward,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200027638 A1 20000518 (WO 0027638)

Application: WO 99US24045 19991022 (PCT/WO US9924045)

Priority Application: US 98105456 19981023

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AE AL AM AT AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ CZ DE DE DK DK DM  
EE EE ES FI FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK  
LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SK SL  
TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW GH GM KE LS MW SD SL SZ TZ UG ZW  
AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC  
NL PT SE BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

Publication Language: English

Fulltext Word Count: 47899

Fulltext Availability:

Detailed Description

Detailed Description

... center of the  
registration marks.

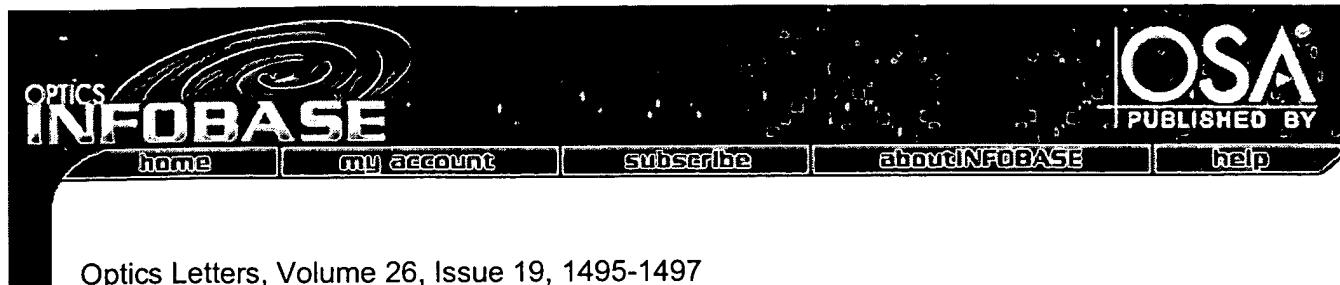
Note, however, that Sainio only claims the use of photo-optical line scanner sensors (using a tungsten halogen lamp as the illumination source) and does not to operate properly. Sainio's specific mention of **diamond**-shaped registration marks is **designed** in fact to aid this process and provide a method of overcoming inherent deficiencies in...

?

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Optics Letters, Volume 26, Issue 19, 1495-1497

October 2001

## Micromachining of diamond with a near-field scanning optical microscope

Igor I. Smolyaninov, Christopher C. Davis

### Keywords (OCIS):

(180.5810) Microscopy : Scanning microscopy

(220.1920) Optical design and fabrication : Diamond machining

### ABSTRACT

Direct-write laser micromachining of diamond on a submicrometer scale with a near-field scanning optical microscope with an uncoated tapered fiber tip has been demonstrated. Micromachined structures can be imaged *in situ* immediately after modification of the sample. An early stage of the ablation process, which is believed to be conversion of diamond into graphite, has been visualized. [Optical Society of America ]

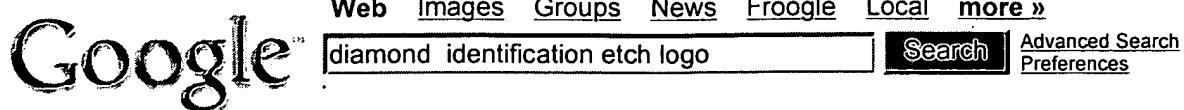
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### References

1. T. Shibata, New Diamond Frontier Carbon Technol., 10, 161, 2000
2. J. K. Park, V. M. Ayres, J. Asmussen, and K. Mukherjee, Diamond Relat. Mater., 9, 1154, 2000
3. P. E. Russell, T. J. Stark, D. P. Griffis, J. R. Phillips, and K. F. Jarausch, J. Vac. Sci. Technol. B, 16, 2494, 1998
4. Y. Sakamoto, M. Takaya, H. Sugimura, O. Takai, and N. Nakagiri, Appl. Phys. Lett., 73, 1913, 1998
5. D. Courjon, eds., in Near-Field Optics, Kluwer, Dordrecht, 1993
6. I. I. Smolyaninov, D. L. Mazzoni, and C. C. Davis, Appl. Phys. Lett., 67, 3859, 1995

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Guide to the New Generation GIA **Diamond** Grading Report ... a micro-laser beam is used to **etch** a microscopic inscription on the girdle of **diamonds** weighing ...  
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We can also use the same type of micro-lasers used by **diamond** jewelers to **etch** **identification** numbers in their **diamonds**, to **etch** UPCs on individual shotgun ...  
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[imprintgolf.com.](http://imprintgolf.com/) ... Description: Bag Tag, lg **diamond** 4" \* 5 3/8" ...  
[www.imprintgolf.com/bagtag\\_page.htm](http://www.imprintgolf.com/bagtag_page.htm) - 96k - Cached - [Similar pages](#)

[Inland Diamond Tip Set User Instructions](#)

Some other examples of uses for **diamond** tips include: You can **etch** a design ... Use the tips to sign your work or engrave **identification** into valuables. ...  
[www.inlandcraft.com/Uguides/UGtipset.htm](http://www.inlandcraft.com/Uguides/UGtipset.htm) - 10k - Cached - [Similar pages](#)

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... will subsequently laser-**etch** their own brand name or **logo** onto the stones. ... If the **diamond** is over .18 cts, it will have a a **diamond identification** ...  
[www.regalimportsld.com/news.htm](http://www.regalimportsld.com/news.htm) - 55k - Cached - [Similar pages](#)

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[www.kellysearch.co.uk/gb-product-778.html](http://www.kellysearch.co.uk/gb-product-778.html) - 47k - Jun 13, 2005 - Cached - [Similar pages](#)

[The INFRASTRUCTURE Semiconductor Equipment & Material Company ...](#)

(STI) is primarily a manufacturer and distributor of **diamond** cutting tools used by the ... The stations may also be used for various **etch** and photo strip ...  
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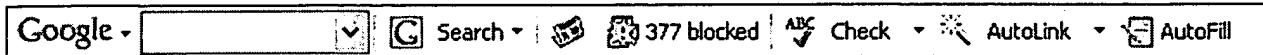
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